



t is with no small amount of pleasure and pride that **Edge** presents the first image of Sony's next-generation PlayStation, replete with front-loading DVD drive and bizarrely Nintendo-esque joypad.

Actually, no, that's a load of rubbish. The machine pictured above is in fact what the original PlayStation would have looked like had Sony continued its partnership with Nintendo to produce a CD-driven version of the SNES (the deal between the two companies having fallen apart in the early '90s), taken from Digital Dreams, a fascinating publication featured this month on p146 which chronicles the work of Sony's prolific consumer hardware designers.

Admit it, though: for a moment there your eyes were transfixed as you scanned the console's fine lines to get a handle on how Sony intended to lead videogaming into the next generation. But this is what new slabs of technology do to us. We like to fill our lives with shiny new objects to enrich our leisure time. They fascinate us. We are obsessed.

Sega wants a slice of your obsession, and on September 23 it will begin dangling the UK iteration of its 128bit Dreamcast format under your noses.

Traditionally it's not **Edge** territory to offer recommendations on potential hardware purchases, but in this case an exception has been made – if only to stop you buying the late-'90s equivalent of a 3DO or Jaguar. If you haven't already bought a Dreamcast on import, get **Edge**'s spin on Sega's great white hope in this month's feature beginning on p52.

Talking of spins, isn't that Sonic on this month's cover? Honestly, despite all this shiny new tech, some things just never change.

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THE SEQUEL TO THE MULTIMILLION-SELLING PLATFORMER GAINS A NEW LEASE OF LIFE IN 3D



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TITANIUM ANGEL 40

UNVEILED: A NEW KIND OF PC ACTION TITLE



INSIDE SILICON VALLEY, UK 74

EXPOSING THE HEART OF BRITSOFT

an audience with...

Michel Ancel

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The latest news from the world of interactive entertainment

Cutting Edge Cutting Edge

DEVELOPERS BUOYED AS SONY'S NGPS ROADSHOW HITS UK

Sony's DevCon '99 provides Euro devcos with their first glimpse of its 128bit console at work



INDIE REPORT CAUSES STIR

Financial analyst Merrill Lynch has shocked the games industry by releasing a report which predicts the launch plans for Sony's next-generation console. Importantly, Sony is a client of Merrill Lynch.

The report says that the initial 'game-only' system will launch on January 23, 2000, in keeping with Sony's favoured 1-2-3 numerology scheme.

It suggests that the console will cost ¥45,000 (approx. £250), with 400,000 units available at launch. By the end of March 2000, 1,000,000 units will have been shipped to retail.

More controversially, Mernil Lynch predicts software for the console will be significantly more expensive than expected. Currently PlayStation games cost ¥5,800 (£32) but NGPS titles will retail at ¥8,000 (£45).

Four new titles and seven upgraded PlayStation games will launch with the console. Hard fact or speculation? A bit of both, surely. evCon '99, Sony's first official next-generation
PlayStation presentation in the UK, took place on
August 12 at the Shrigley Hall Hotel in Cheshire. Held over two
days, around 100 of Europe's premier developers were
invited, including Argonaut, Lionhead, Core and Bullfrog.

"Everyone was enthusiastic, although there were very few questions," one industry source told **Edge**. "Until they get dev kit, developers don't really know what questions to ask. But when it's out, it will be the other extreme altogether."

"The whole point of DevCon was to allow people to take a step back and think how they are going to approach it," said Paul Holman, SCEE's director of technology. "We tried to provide a whole picture of the system."

One piece of information to surface was that no one is allowed to refer to the system as 'PlayStation 2'. Instead it must to be termed the 'next-generation PlayStation'. "There

is a name bandled around, but Sony won't tell anyone outside of Japan," said one insider. "But whatever it's called, it certainly won't be PlayStation 2."

Simulating the next generation

Each day began with technical demonstrations from Sony Europe's research teams. These were followed by presentations from middleware vendors, while there was also an exhibition area where initial builds of next-generation PlayStation dev kits were running demos. Sony also handed out copies of Cygnus' software-only simulation package. Although not in the range of real hardware, it allows developers to test the major functionality within games.

One of the most impressive presentations came from Criterion Technologies – it showed its Renderware 3 graphics engine, as used in the extreme racing game *Trick Style*, on



Criterion used its Renderware 3 technology at Devcon '99 to run a next-generation PlayStation build of futuristic hover racer *Trick Style* (Dreamcast shot, above), hammering home its message of commitment to 128bit formats



Sony's Phil Harrison wants the company's next machine to reach as wide a userbase as possible, not just gamers

next-generation PlayStation hardware. Although the code is not fully optimised, it proved that developing games for the system should not be as difficult as some have suggested.

"We will have a beta version of Renderware out at the start of September for the Japanese market," said **Mike King**, Criterion's marketing director. Fully optimised code will be available by the time UK developers receive dev kits.

Other feedback from the conference suggested that Sony has built a high level of diagnostic support into its new hardware. "With the original PlayStation, lots of people speculated about the optimal combinations of GTE instructions," one developer told Edge. "All that kind of stuff can be measured exactly on NGPS. It has fancy hardware that can tell how many clock cycles this routine took and how many cache hits it made. The real hackers who need to tune every last clock cycle are really going to love it."

Brits ship to Japan

But while the majority of UK developers are still waiting for their dev kits, Liverpool-based Rage is already hard at work on a title. Having linked up with its Japanese publisher, Imagineer, the company has shipped programmers to Tokyo, where they have started coding using Imagineer's development kit.

"The optimisation of the code is proving to be very interesting, because the system is massively parallel," said **John Heap**, Rage's IT manager. "However, we have got models up, and textures and lighting. We hope to show something at the Tokyo Game Show."

Based around an existing physics engine and a new graphics engine, Rage expects its forthcoming off-road racer to be ready for the console's Japanese launch. But, strangely, one of the team's hardest problems has been deciphering the English manual, which was machine-translated from Japanese, with characteristically amusing results.







Kessen (main) and A6 (top) are two confirmed NGPS titles, although Euro devcos have coders in Japan for their own games. Sony's Website (top right) will stream NGPS footage from TGS

Liverpool-based Rage is already hard at work on a title. Having linked up with its Japanese publisher, the company has shipped coders to Tokyo, where Imagineer's NGPS dev kits await

Reaching out for the non-gamers

Sony representatives were also present at the Hot Chips conference held at Stanford University. In a session chaired by SCEI president Ken Kutaragi, Sony's vice president of R&D, Phil Harrison, showed new technical demos highlighting the graphical power of the NGPS. He also revealed some of Sony's future thinking about the system, suggesting that voice control of games would be a definite possibility. The console may also ship with software that allows users to import digital photos, animate them in 3D and then email to friends. "Our real goal is to come up with new forms of creative expression that reach an audience of people not interested in games," he said, fuelling speculation that Sony intends to lever the system into the home entertainment market.



Another revelation at the Hot Chips conference was that Sony's next-generation machine will use normal PlayStation joypads as standard

NINTENDO CLINGS TO ZELDA AT SPACEWORLD '99

Show leads with 48 games and infamous hardware add-on but no next-generation console developments







The long-awaited F-Zero X DD will allow users to design and save their own tracks to disk

a stable frame rate. Zelda: Gaiden's current release date is scheduled for March 2000 in Japan.

Other N64 highlights will include Super Mario RPG 2 and Mother 3, both having been switched from 64DD to

With Ocarina of Time 'rushed' out in order to appease the N64-owning community, Nintendo was forced to leave a few stones unturned – something it is addressing with Zelda: Gaiden, which mixes elements both familiar and new









Mario Artist (top) will encourage 64DD users to explore creativity

fter its non-appearance last year, Spaceworld is set to take place between August 27 to 29. Held at Tokyo's Makuhari Messe exhibition centre, Nintendo's show is heavily skewed towards a young audience, with themed areas such as the Pokémon Ring Corner and the Smash Brothers Tournament Corner expected to be popular. Unlike the Tokyo Game Show, Spaceworld has no dedicated press day, and Nintendo is not expected to make any announcements

The rest of the exhibition hall will be organised along hardware lines with areas for Game Boy Color, N64 and Nintendo's 64DD add-on disk drive. The highlight of the show, however, is certain to be the follow-up to Legend

about its next-generation hardware.

Of the eight announced 64DD titles on display, only Sim City 64 and F-Zero X DD have survived the launch lineup once mooted for the unit, and the software is focused towards the domestic market

of Zelda: Ocarina of Time. As **Edge**went to press a handful of screen
shots from Legend of Zelda: Gaiden
had been released, with Nintendo
taking trouble to emphasise that the
title still requires a fair amount of work.
Gaiden translates as 'side story', of
course, making the game an expansion
on the N64's Zelda title rather than an
entirely new experience.

Although the game will now launch on cartridge only (the 64DD version having been canned some time ago), it will support the N64's 4Mb Expansion Pak, which Nintendo intimates will allow more enemies to be displayed at cartridge format, although an additional 64DD release of *Mother 3* material is still expected.

Of the eight announced 64DD titles in display, only Sim City 64 and F-Zero X DD have survived the launch lineup once mooted for the unit. But with the 64DD restricted to a Japan-only release, most of its software is focused towards the domestic market. Yousuke ide's Mah Jong, for example, is a classical simulation of the ancient Japanese boardgame, while Kyojin No Doshin – literally Doshin the Giant – is a Black and White-style RPG.



Spaceworld '99 is organised into specific areas, highlighting either hardware or software, with corners for big titles such as *Pokémon*























Nintendo has a varied package lined up for Spaceworld '99, and some of its biggest titles include (clockwise from top left) Mario Party 2, Bass Tsuri, Mario RPG 2 (two shots), Mother 3, Custom Robo, Sim City 64 (two shots), Mini Racers, and Kirby 64, most of which will enjoy a PAL release next year

Looking to the future

In other developments Nintendo has announced the initial wave of middleware partners for its next generation console. Metrowerks, Applied Microsystems and Factor 5 are the first hardware and software tool companies to sign up for the program. Applied Microsystems will design and manufacture development hardware, while Metrowerks provides a version of its Codewarrior software, optimised for the IBM Gekko chip. (Ironically, it is also a partner in Sony's middleware

program.) Veteran developer Factor 5, most recently responsible for Star Wars: Rogue Squadron, will provide audio tools to coders.

Developers have also begun to announce their plans for Nintendo's next machine, with N64 specialist Acclaim confirming that it has started work on converting its QuagMire and Vista game engines (used in Shadowman and sports titles respectively) for the console. Acclaim is one of the few UK companies to possess a first-iteration dev kit.

GAMES ON SHOW AT SPACEWORLD '99

Nintendo 64 64 Wars Army Men: Sarge's Heroes Bakurets Bass Tsuri Bomberman 2 Beast Wars Metal 64 Custom Robo Daikatana Destruction Derby 64 Donkey Kong 64 Excitebike 64 Extreme G2 Gauntlet Legends Jet Force Gemini Legend of Zelda: Gaiden

Mario Party 2 Mini Racers Mother 3 NFL Blitz 2000 On & Off Racing Perfect Dark Rat Attack Rayman 2 Revolt Road Rush 64 Shadow Man Star Wars: Rogue Squadron Super Mario RPG 2 Super Robot Taisen 64 Tonic Trouble Top Gear Hyperbike V-Rally Edition '99

Viewpoint 2064 Virtual Pro-Wrestling 2 Win Back World League Soccer WWF: Attitude Yakouchuu 2

64DD F-Zero X DD Gendai Daisenryaku Japan Pro Golf Tour 64 Kyojin No Doshin 1 Mario Artist: Paint Studio Mario Artist: Talent Studio Sim City 64 Yousuke Ide's Mah Jong

SEGA SHIES AWAY FROM PREMIER EURO SHOW

While Nintendo jets in Shigeru Miyamoto to lend credibility, this year's ECTS will miss Dreamcast

ven before it got underway, the big surprise of this year's ECTS was Sega's announcement that it would not have a stand at Europe's biggest videogame show. Instead it has opted to hold a separate event on the opening day. Cost was thought to be one of the main reasons for the decision, with Sega of America rumoured to have spent \$5 million on its presence at E3. The cost of a major splash at ECTS is around £1 million. But with its event labelled as a Dreamcast 'launch party', it seems that Sega wishes to specifically target the national media rather than the videogame industry.

Financial diligence is on the minds of other game companies as well, with Activision, EA, Microsoft and GT absent from the show, while big names such as Eidos, Infogrames and Virgin/Interplay, until recently renowned for throwing their weight around at trade shows, are restricting themselves to hospitality suites rather than public stands. Instead it's been left to Nintendo and Sony to maintain ECTS's

heavyweight credentials. Nintendo has made the show a priority, with the presence of Shigeru Miyamoto promised. Legend of Zelda sequel Zelda: Gaiden is also expected to be make its first appearance outside Japan, albeit most likely in video form. Other Nintendo highlights will include Rare's trinity of titles and the first two Pocket Monster Game Boy releases for the UK market, Pokémons Red and Blue. Final Fantasy VIII, Wipeout 3 and Gran Turismo 2 will feature heavily on Sony's stand, along with a handful of new NGPS demos.

Codemasters is certain to have a strong show, too, with Colin McRae Rally 2, TOCA 3 and the latest in the Micro Machines series being shown behind closed doors. Other companies likely to be making news include Blizzard, which is set to announce a new high-profile project, and Acclaim, which is expected to reveal new development partnerships and details of big-name licences it will be bringing to the next generation of consoles. Full report next month.

SEVEN TO SEE

Evolva (Computer Artworks)

C & C: Renegade (Westwood)

The Sims (Maxis)

Giants (Planet Moon)

Commandos 2 (Pyro)

Turok: Rage Wars (Acclaim)

Halo (Bungie)

BAFTA GAME AWARDS DRAW UPON QUALITY

Less-is-more approach prevails as industry's youngest gong show approaches

evelopers have been far more selective in their approach to this year's BAFTA Interactive Awards. Overall, numbers are down, but a spokeswoman for BAFTA said it was very satisfied with the entries. "It's all about quality, not quantity," she told Edge. "Last year people were entering a title into five or six categories. But now, they are thinking where a title would be best suited."

There are two main categories in this year's awards, Best Game and Innovative Game, receiving 20 and 18 entries respectively. The official nominations will be announced on September 20.

The growing importance of games in the UK's film and TV industry was also highlighted in a BAFTA conference on synthespians earlier in the month. One of the speakers was Sony studio manager Brendan McNamara who discussed the impact of the next-generation PlayStation on the realism of game characters.

Opening his presentation with the CGI intro sequence from *G-Police 2*, he





A recent BAFTA conference saw Sony singing the praises of synthespians. Shame about the loss of detail from source to animated character, though

commented that the next-generation
PlayStation would allow such visuals to
be generated in real time. The computing
power of the system would also allow
developers to break out of the
twodimensional behaviour that many
game characters suffer. One example
McNamara used was the NGPS-bound
sequel to Sony's still-to-be released
sports game, This is Football. "We'll be

able to motion capture Dennis Bergkamp, and you will actually play and score goals just like Dennis," he said.

McNamara also touched on the success of online games such as EverQuest. "We see these game being straight opposition to TV," he said. "People are playing them 50 hours a week. They are competing head-to-head with soap operas."

CUTTINGS

Take 2 opens chequebook

Following its recent 19.9% acquisition of Bungie Software stock, Take 2 has made a bid worth £8m for DMA Design.

Pikachu hits PC

With Pokemon fever in overdrive in the States, Nintendo has licensed the game to The Learning Company. The company will release two PC Pokemon titles this autumn.

Elixir cashes in

As part of its long-term publishing deal, Eldos has bought a 5 per cent stake in Elixir Studios for £600,000. Eldos owns the rights to Elixir's first three games.

Infogrames theme park

The ambitious French publisher Infogrames has announced a deal with Iwerks, a company specialising in theme park ride manufacture and movie production. The first result will be a large-format independence Wars film. Products based on Outcast and V-Rally content will follow.

Sony gets Unreal

Epic is to create a version of its powerful Unreal Tournament engine for the next-generation PlayStation. "The big thing for us is RAM and raw CPU power. PlayStation 2 will deliver both," said Epic VP Mark Rein.

Dreamcast orders halted

With over 250,000 Dreamcasts preordered in the States, US retailers including Babbages have stopped taking deposits on the console, following concerns over Sega being able to fulfil commitment on further numbers.

CA GOES LIVE



Designed to bring together art professionals, graphic designers and image manipulators, the first Computer Arts LIVE! show runs from September 14-15 at the Design Centre in London, before moving up to Manchester Town Hall from September 20-21.

Key design companies already signed up for the event include v23, Designers' Republic, The Attik and post-production house Rushes. Alias|Wavefront, MetaCreations and Apple will also be showing off new products. Booking details can be found at:

www.computerarts.co.uk

SEGA US CHIEF BAILS OUT

Key departure rocks boat as Dreamcast approaches

n a shock move, Sega of America president Bernie Stolar has left the company less than a month before Dreamcast's launch. A terse SOA press release baffled the industry, announcing the virtually unknown Toshiro Kezuka as Stolar's replacement in the role of chief operating officer, ending: 'Effective August 11, 1999 Bernard Stolar is no longer with Sega of America'. Ironically it's not the first time Stolar has experienced this fate. Similar circumstances saw him ousted from Sony prior to the US PlayStation launch.

Always a controversial figure, Stolar had been with Sega since 1996. His high-profile campaign for Dreamcast was considered by many to have overcome the resistance of US developers to Sega following the Saturn debacle. More recently, though, he had been

Bernie Stolar may be \$5 million richer, but he needs a new job

outspoken about Dreamcast's Japanese launch, calling it a 'failure'. He suggested that he was going to save the company.

Sega of Japan was known to be concerned about his behaviour and it's thought that Kezuka-san was moved from Japan to America expressly to keep an eye on him. Sources inside Sega said Stolar received a \$5m severance package.

PRESCREEN

EDGE PREMIERES INTERACTIVE ENTERTAINMENT'S FRESHEST FACES

First impressions count

The value of the five-minute hook

t may come as a surprise, but game journos do not spend every waking hour joypad in hand (although it has been known for them to dream about games). The misconception does hide a subtle truth, however, journos may not spend hours playing each game, but they do play a lot of different games - 20 minutes here, ten minutes there, two minutes checking out that dodgy demo from Yugoslavia.

But ask a reviewer how many games they've completed in the past six months and it's a different story. There simply isn't enough time within the ravages of magazine production schedules. This, in turn, generates another myth. "I can tell how good a game is after a couple of minutes," some will say. And while Edge despises lazy evaluations as much as any wronged developer, there's some truth in that statement, too. Think about the greatest games: Super Mario 64, Gran Turismo, Doom, GoldenEye. It was immediately obvious they were special. Simply moving around in these diverse worlds was enjoyable.

It's a good lesson for devcos. While they concentrate on the entire span of their game, they would be well served to concentrate on packing enjoyment into the first five minutes of play. Not

literally the opening 300 seconds, of course, but the way the control and feel of the complete game diffuse into those first scenes. It's certainly a fine line. Games need to be intuitive, but not obvious. Information and abilities should be carefully introduced throughout the game. Think Legend of Zelda and Final Fantasy VII.

This isn't just a sop to the ever-widening demographics of the market, though. The call for games that can be picked up and played by your grandparents is, frankly, a spurious one. The best developer in the world isn't going to get OAPs playing Tekken or ISS '98. Instead, the best games should be open to players who aren't necessarily fans of that genre. Every time Sony gets hardcore RPG freaks or flight-sim anoraks playing PaRappa the Rapper, it's a victory for gaming in general. Conversely, every cloned firstperson shooter released is worse than bad news, it's a step backwards. More than any other cultural experience, games are about creating imaginative and enjoyable universes to exist in. And any developer whose vision is so confused that it takes ten hours to share should seriously consider changing careers.







If a game is worth playing, it should be immediately obvious. From left to right: Mario 64 (Nintendo), Gran Turismo (Polyphony) and Doom (id) all offer unique gameworlds that gamers want to stay in

Edge's most wanted

Those preparing to be toasted...











Ready	12	DII	m	blo
neau	14	Ru	***	nic

(DC) Midway

This Dreamcast's bruiser is so addictive that its introduction into Sega Europe's offices has halted any thoughts of work. A Punch Out for the late '90s

Rogue Spear (PC) Red Storm

Recently beta code has seen Edge planning four squad assaults that work like clockwork, leaving no one alive. Shame about the hostages, though

MDK2

(DC/PC) Bioware

Shiny isn't in control of the follow-up to its cult hit (development duties having fallen to a Canada pased codeshop), but Kurt Hectic remains super cool.

Jet Force Gemini

(N64) Rare

Of Rare's three big current projects, this has perhaps the lowest profile but, conversely, maybe the most potential, Expect big crowds for it at ECTS.

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Kikaio

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Wild Arms 2

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Titanium Angel

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Rayman 2

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PRESCREEN ALPHAS

THE PC'S PREMIER STORY-LED FPS GETS A MISSION-PACK TWIST, WHILE CODEMASTERS GOES 4X4

HALF-LIFE: OPPOSING FORCE

FORMAT: PC DEVELOPER: GEARBOX























It's not being developed by Valve, but the expansion pack to its masterpiece is looking hot, nevertheless. Opposing Force gives gamers the opportunity to play as one of the assault team neutralising the Black Mesa facility. New weaponry includes the meaty looking pipe wrench, as well as the Barnacle: a handheld version of the ceilling-dwelling aliens with long tongues. Gearbox also promises that you'll be able to team up with Alcontrolled soldiers during the operation for pseudo-multiplayer action.

OFF THE ROAD

FORMAT: PC/PLAYSTATION DEVELOPER: INVICTUS











Codemasters continues to show a canny knack for signing innovative products from surprising sources with the announcement of all-terrain racer *Off the Road* (working title). Hungarian developer invictus expects to have the PC version out by Christmas. Gameplay will revolve around large levels, and Capture the Flag and 'soccer' multiplayer modes are also mooted.

INDEPENDENCE WAR: DEFIANCE

FORMAT: PC DEVELOPER: PARTICLE SYSTEMS









It may have received a bumpy ride in the UK, but US gamers went for I-War, as it then was called, in a big way. Over 200,000 units were shifted.

Cue the emergence of a special edition, subtitled Defiance. Shipping in a bundle with the original game, the mission pack lets players switch sides and fight as the Indies. There are 18 new levels, and the change of perspective reveals extra information about the Independence War universe.

GO-KART RACING

Scheduled to arrive in October, this PC kapting simulation from German developer Data Becker (normally associated with lifestyle and utility products) currently features, among other aspects, nine tracks (both outdoor and indoor varieties), six different karts (including various cc classes and off-road versions), network play, and a track editor. The telemetry is said to have resulted from months of research and testing with real karts, and ex-F1 man Martin Brundle may endorse the final game.





BATTLEZONE II

Improved AI, a simplified interface and more multiplayer options are among the new features for Battlezone II. Over 30 units are available, ranging from turrets to tanks and air support, while the new control menu means that squad-based teams can be ordered with more finesse than before. A stranger addition are the indigenous man-eating animals.





FORMAT: PC DEVELOPER: PANDEMIC STUDIOS







NOX

FORMAT: PC DEVELOPER: WESTWOOD STUDIOS

With Diablo II and Darkstone (see p93) already on the scene, Westwood is entering a crowded market with its action/ RPG title. It has high hopes for Nox, however, with multiplayer being a particular focus. As in Diablo, characters trained within the confines of singleplayer missions can continue to be upgraded in online play as well. Of the three classes warrior, conjuror and wizard - the latter looks likely to be favourite, thanks to the different spell combinations available.























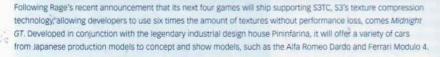


Jet: X is the first fruit from the talent behind Wipeout, who got bored and decided to branch out on their own. Now armed with a publishing deal from Infogrames, the six-strong learn is working towards an early-2000 release. No gameplay details have been announced other than it is a racing/shooting title using planes such as the F-18 Hornet and MIG-29.

MIDNIGHT GT

FORMAT: PC/DREAMCAST DEVELOPER: RAGE









GOO! GOO! SOUNDY!

Game names just don't come dafter than this, the latest Bemani title from from the state of the





SUPREME SNOWBOARDING

FORMAT: PC/DREAMCAST DEVELOPER: HOUSEMARQUE

Not only has Finnish developer HouseMarque sought professional advice for its snowboarding title, but with a workforce consisting of enthusiastic amateurs it expects to simulate the experience perfectly. Realtime lighting and character animations have been a priority, with each of the six customisable and skinned characters using 2,300 polygons apiece.











STAR WARS: FORCE COMMANDER

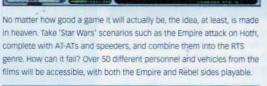
FORMAT: PC DEVELOPER: LUCASARTS













TOY STORY 2

FORMAT: PS/N64/DC DEVELOPER: TRAVELLER'S TALES

A free-roaming 3D action platformer, Toy Story 2 is in the (relatively) safe hands of UK codeshop Traveller's Tales. Following the mediocrity of its Bug's Life movie-to-game translation, this looks like being a much more convincing affair, with the player assuming the role of Buzz Lightyear











MOTORCROSS MADNESS 2

FORMAT: PC DEVELOPER: RAINBOW STUDIOS







The first game to separately model rider dynamics and bike physics returns in souped-up form. It will be interesting to see how it measures up to Edgar Torronteras' Extreme Biker (E74) but it seems unlikely to feature the wacky, consolestyle environments offered by Delbus' Impressive-looking debut. Hopefully, Rainbow will have sharpened up the rider tricks, though, providing proper controls instead of the scripted motions that characterised the title first time around.















One of gaming's perennial projects, the release date from fast-talking Vis founder Chris van der Kuyl is November, at least for the N64 version. It should be followed a month or so later by the PlayStation and then PC versions. Gameplay is said to be less platformy that originally conceived, the title having been rewritten three times during its development. Instead, off-the-wall sub-missions such as herding groups of grannies around a TV have been brought to the fore.









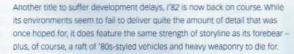




INTERSTATE '82

11/100

FORMAT: PC DEVELOPER: ACTIVISION













CRASH BANDICOOT RACING

FORMAT: PLAYSTATION DEVELOPER: NAUGHTY DOG

With a massive nod and wink to Mario Kart, Naughty Dog is attempting the same trick: take a well-loved selection of platform-game characters, give them wheels, and let them roll. And while this PlayStation karting clone features the usual power-ups, successful races will also allow players to upgrade their karts, customising engines, tyres and exhausts.











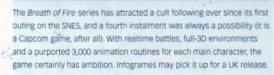
BREATH OF FIRE 4

FORMAT: PLAYSTATION DEVELOPER: CAPCOM















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ROCKMAN DASH 2

FORMAT: PLAYSTATION DEVELOPER: CAPCOM











The original Rockman Dash may have seemed an exploitative title, released merely to give an established character the chance to grab the attention of a freshly poly-hungry audience, but it offered moments of Inspiration typical of developer Capcom. This sequel looks to offer a more rounded structure and story while delivering action by the skipload

X-MEN

FORMAT: PLAYSTATION DEVELOPER: SYROX

It may not set pulses racing in the way Marvel Vs Capcom did, but the London-based Syrox is at least taking Marvel Comics' superheroes into the realms of 3D. Part of Activision's long-term content deal with Marvel, 14 characters will be playable, including favourites such as Wolverine and Iceman. Activision has recently scaled up the ambition of the title - as well as being able to morph into your character's alter ego at certain points, mid-air combat is promised, too.











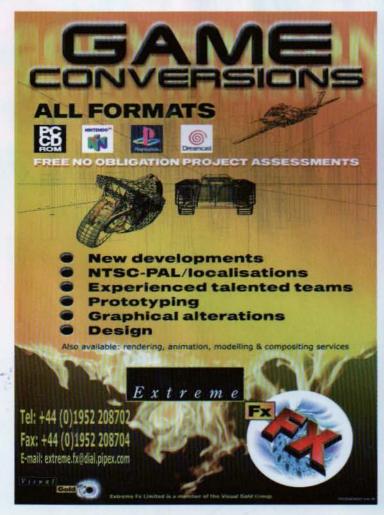


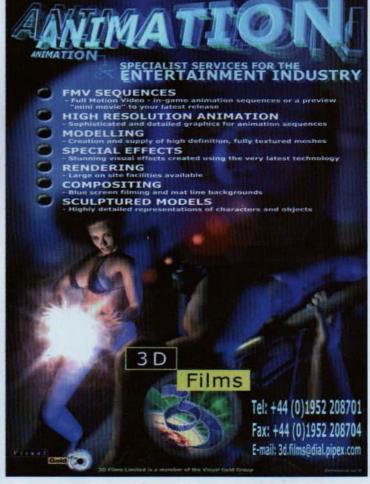




A rock-solid conversion of id's favourite son seems to be on the cards for PlayStation owners thanks to the efforts of UK-based Hammerhead. Of the 20 missions available, all have been redesigned from the PC version, and some entirely new ones added. Both two- and fourplayer capabilities are included in multiplayer, and the action skims along at a highly respectable rate, with little loss of detail. Technically, a triumphant PS project.







VAMPIRE: THE MASQUERADE - REDEMPTION

Nihilistic Software may be a new outfit, but the industry veterans behind it are greedily sinking their fangs into a lucrative RPG licensing deal







thirdperson perspective, courtesy of the

White Wolf's precious Vampire brand.

been raging in the twilight zone of tabletop

Dungeons & Dragons may typify American

swords-and-statistics gaming, but in less than

greatest rival, the world's number two best-

selling pen-and-paper creation. AD&D, like competing systems GURPS and Warhammer, has been computerised, most recently in the form of Baldur's Gate. Now that Activision's deal has

eight years the Vampire system has become its

make-believe for some time. Advanced

Behind the dice and the beards, a battle has

Characters are constructed from over 2,000 polygons, and their faces appear in your status bar when they're conversing with you so that you can actually see their lips move. Early builds based on the 3D Nod engine look stunning (above right)



proprietary Nod engine; second, Nihilistic plans to alter the way multiplayer fantasy games are played over the Net; and third, it's the first time a developer has been permitted to tinker with

With its innovative co-op multiplayer design, Gresko wants Vampire: The Masquerade -Redemption to change the way computer RPGs are played online

ormed only last year, the Californian Nihilistic Software was assembled by seasoned ideas men Ray Gresko, Robert Huebner and Steve Tietze. With a portfolio that includes Dark Forces, Jedi Knight, Descent, Falcon 4.0 and Starcraft, you know you're in esteemed company, so the three immediately signed a publishing deal with Activision and are currently a month away from completing their first title, Redemption.

It's a red-blooded roleplaying adventure which should set the online communities alight for three reasons. First, it abandons traditional RPG presentation in favour of an attractive

Lead level designer Steve Tietze has worked on Duke Nukem 3D and Quake II

secured the Vampire PC licence for the foreseeable future, Nihilistic has the chance to stamp its mark on the inevitable series. Early builds of Redemption, set in the Masquerade continuum and casting you as the undead Christof, were unveiled this year at E3 and, more recently, at Activision's Activate '99 event in Scotland. Speaking to Edge at the latter, Gresko, president of Nihillistic, summarised his design brief: "You'll be playing as an undead clan

member over a span of some 800 years. Vampire

Format: PC

Publisher: Activision

Developer: Nihilistic Software

Release: October

Origin: US





The singleplayer narrative will take you from the medieval 12th-century Europe to New York in 1999, via four sprawling street-level scenarios

is about telling stories. We hope this will grant a fantastic opportunity for character development. Christof's adventures will take place in four fully 3D worlds, set both in the dark ages and modern times, and will be a classic party-based RPG."

Medieval Prague and Vienna, plus modern London and New York, are being virtually.



The flexibility of the engine owes much to co-founder Robert Huebner, who began his career designing the network capabilities of Interplay's Descent

right in on Christof's eyes, or slide the perspective upwards above the rooftops."

Activision has also licensed a Quake map editor, and Nihilistic is tweaking it to accommodate Nod's features. "All the level-editing tools will ship with Redemption," claims Gresko. "The design interface will be intuitive and you'll have immediate access to all our textures and readymades, such as doors and street lamps. Our objective is for you to be telling your own stories."

Traditional table-top roleplaying obviously involves a group of friends participating in a narrative improvised and moderated on the fly by one of the group, a referee often termed a DM or Storyteller. In all PC roleplaying games to date







The Vampire system incorporates all the world's undead lore (top). There are classic black-velvet Goths, Buffy-style ugly blood-suckers, wraith-like demons and worse

The demo levels looked stunning, with dynamic lighting, fog effects and broad open-air vistas putting the Nod engine through its paces

recreated for the game, and the demonstration levels look stunning, with dynamic lighting, fog effects and broad open-air vistas putting the Nod engine through its paces.

Gresko's background is in 3D gaming technology. At Microprose he worked on the visuals for Mig-29, Falcon 4.0 and Top Gun, and he designed Dark Forces and Jedi Knight for LucasArts, also providing material for early stages of Grim Fandango and X-Wing. Alliance. "Our Nod engine is capable of some great effects," he asserts. "All the characters are constructed from over 2,000 polygons and have fully articulated faces linked to Nihillistic's lipsynch technology. We've written hundreds of lines of dialogue for them to speak. The control system is mouse-driven, a little like an RTS interface, and Nod is scaleable – you can zoom

 even the multiuser variety – you participate as an individual in a world run by computerised rules. Gresko wants Vampire to be different.

"Multiplayer Redemption sessions can take various forms," he explains. "A group of friends will join an adventure remotely but they'll share the story. It'll be flexible because the Storyteller controls the world. He can shape the environment during the game, even talking for the NPCs his friends encounter. He can dish out rewards after a fight and even tweak the level mid-game by adding an extra door or dropping in a monster, to keep the game alive. We want it to become a beautiful, 3D extension of the Vampire system, where a group of people who already know each other can play a story they've created for themselves with the help of our tools. This is the future of online roleplaying."

THEME PARK WORLD

Bullfrog bounces back to prove that it is still master of the off-beat strategy,

by resurrecting its own classic title with an added saccharine rush











Bullfrog began work on *Theme Park World* using the *Populous: The Beginning* engine, but soon found it limiting and constructed a new one

t's about time the cult of the 'Therne' game was curbed. The problem with pretenders to Theme Park's crown, such as Theme Aquarium or Pizza Tycoon, is that nobody really ever fantasises about running an aquarium, let alone a chain of pizza restaurants. Theme Park is different. Everyone has visited Alton Towers or Chessington World of Adventures and wondered why they don't scrap the bit where they keep the spinning teacups in order to install another rollercoaster. We've all wished for a few more

dips in the log flume after queuing for an hour to experience its pedestrian descent. These are healthy, adult desires. Commanding armies and conquering worlds is all well and good, but designing a theme park is the pinnacle of videogame wish-fulfilment.

It's this kind of exquisitely detailed 3D perspective which best demonstrates Theme Park World's significant advances on previous theme strategy games

With the original Theme Park (8/10, **E**11), a massive success across a number of formats, Bullfrog would have been churlish not to revamp the concept for the new generation. Five years on and Theme Park World is barely recognisable in visual terms from its predecessor. You could ask why impressive graphics are necessary in a management sim, but here they define Theme Park World's unique style and, more importantly, they allow you to enter the body of a visitor and take a tour of your park in full-blown 3D. This includes the ability to ride your own rollercoasters, a feature which is undeniably inspired, and you can do the same with any of the 20 rides featured per theme.

There is a downside to Theme Park World's graphical panache, however. Unlike the original,



The bottom-left corner houses your walkie-talkie interface; the top-left figure counts your cash; and in the bottom right sits the adviser, dispensing nuggets of wisdom in a sarcastic Scots voice

Format: PC/PlayStation

Publisher: Electronic Arts

Developer: Bullfrog

Release: November (PC); January 2000 (PS)

origin: UK













Theme Park World's online provision is particularly intriguing. In addition to simply posting your completed parks on the site, you can send thirdperson-controlled kiddle avatars into other people's parks, ride their rollercoasters and pick up some construction tips for your own endeavours along the way

Longevity is provided by a system of golden tickets, awarded for certain achievements, allowing you to access additional themes

Bullfrog recommends you try a 266 installed with a G200 card. That isn't to say there's not a great deal to recommend Theme Park World to the more impatient gamer, though, as it is possible to select your theme and get straight down to constructing the best rollercoaster imaginable.

The interface is controlled via a walkie-talkie icon in the corner of the screen, and the best training is received on the job, although there's no need to explore every option until your park is teeming with hyperactive kiddies. They literally pour in, but you can build at speed in order to cater for their needs and relieve them of their pocket money. They're mischievous critters and will unashamedly demonstrate their

dissatisfaction by assaulting the staff. Luckily, you can hire security guards who retaliate with truncheons, and so a network of surveillance cameras is but one of the many ventures you'll eventually need to fund. If the management of your park begins to spiral out of control, an onscreen adviser will dispense advice.

Longevity is provided by a system of golden tickets, awarded for certain achievements, allowing you to access additional themes. There are four in all, with a further four currently under construction for an add-on disc. All are customisable in terms of shape, colour and name, which makes them perfect for posting on the Net.

Bullfrog has obviously thought very carefully about www.themeparkworld.com, allowing you to connect without exiting the game. A simple click will publish your park online and enter it into an ongoing top 100. New rides should be available for download from launch, and Bullfrog is considering posting the relevant development tools online to take the interactive element to its full and natural conclusion.

In the absence of such internet competition. the hi-res PlayStation version will provide more structured goals. A diversion from the strategy will be provided by 16 playable mini-games. A suitable interface is under construction, with the actions of the function buttons always displayed.

Bullfrog looks to have pulled off a coup by creating a game with a depth of strategy that will appeal to the inner child and the businessman within us all. It makes recent imitator Rollercoaster Tycoon look like a village fair by comparison and reclaims the concept of the 'Theme' game from absurdity.







All images displayed on this spread are taken from the PC version - the PlayStation port is two months behind in development terms and is skewed to place more emphasis on mini-games



Golden tickets are gained for building rollercoasters of a certain height, length or speed. If it's either too scary or too tame, the kids will abstain.

KIKAIO

Street Fighter meets Virtual-On in Capcom's least famous beat 'em up. Can a visually impressive Dreamcast conversion turn around the fortunes of this neglected title?



Players choose from 12 different robot suits – some retro in design, some military, some comical – before battling with similarly attired opponents



As you'd expect from beat 'em up veteran Capcom, a hefty bundle of diverse fighters lines up for selection in the game

Format: Dreamcast

Publisher: Capcom

Developer: In-house

Release: TBA

Origin: Japan

he Macross school of anime – where pilots don elaborate mobile suits before engaging in battle – continues to have a profound influence on Japanese videogame culture. Non-fans who thought From Software's Frame Gride would be the Dreamcast's only mech battle game have been deluding themselves. Capcom has taken its little-known robo-beat 'em up Kikaio (or Tech Romancer' as it's known in the west) and converted it to Sega's superconsole, after a disappointing arcade run.

In Kikaio, players choose from 12 different robot suits before battling with similarly dressed opponents over a range of largely 2D arenas. Each robot looks and fights differently – some are retro in design, some military, some comical – fighting is airborne as well as ground-based, and you can launch long-range projectile attacks as well as engaging in close-quarters physical combat. The game uses a familiar Capcom engine: combos, special moves and counter attacks are all possible, and there's a Special Attack gauge with three levels of power. Here, though, you'll also be able to collect power-ups, bringing a Power Stone vibe to the proceedings.

As for game modes, versus is present as usual, and there are two oneplayer options. Story





Fighting is both airborne and ground-based, and you can launch longrange projectile attacks as well as engaging in close physical combat

mode gives you a multi-path journey through a number of fights, each bout separated by a CGI movie to forward the plot. 'Hero Challenge' is a more straightforward arcade-style mode which pits you against 12 antagonists – the difference here is you get ranked at the end of each battle according to the degree of heroism you've shown.

The Kikaio coin-op originally appeared on the PlayStation-based System 12 board, but its poor revenue turnover kept it from Sony's console. However, thanks to the current Dreamcast beat 'em up explosion, Capcom no doubt feels it can slip in just one more Street Fighter variation to tempt 128bit fighting fanatics.



Despite Virtual-On's following, mobilesuit combat remains a niche genre here, hampering the chances of a Kikaio in PAL form

AGE OF EMPIRES II

With deep and open-ended gameplay, Age of Empires broke sales records as well as gamers' expectations. Now its sequel takes the historical drama 1,000 years further on









Although Age of Empires II can be won by purely economic means, players will do well to make sure they are protected by an army and strong fortifications



The size of levels in Age of Empires II is around four times a big as in the original, allowing players to control more area and resources



All 13 races have some naval power, with the Goths and Byzantines possessing particularly strong ship units

robably the most complex game to sell over a million copies, Age of Empires brought new levels of decision making to realtime strategy. Starting with one of 12 different races, players had to build a world-conquering civilisation, constructing cities and developing new technologies through the Stone, Bronze and Iron Ages. And while it was a challenging experience, the two years since its release have seen Age of Empires become the most popular RTS game, particularly in US online circles, where players are a refreshing mixture of gender and age.

Taking up where they left off after the expansion pack, *The Rise of Rome*, Bruce Shelley and his team at Ensemble have placed the sequel in the 1,000-year period following the end of the Roman Empire. There are 13 new civilisations to choose from, including the Britons, Persians and Byzantines, each with their own special units and attributes. For example, the Britons are strong archers, with longbowmen their specialist units, whereas the Persians have war elephants.

However, one of the main strengths of the original was the way it allowed players to win via financial or military means. With this in mind, the global economic system – based around four key resources – has been enhanced. Players requested some sort of an inter-resource exchange, and so Ensemble has introduced trading routes between the different market places, allowing players to tax the traders, gaining gold they can use to buy other resources.

The game's graphics have been fundamentally improved, too. Maps are four times larger, and individual figures are bigger to make them more identifiable. But to prevent them being lost behind buildings, their outlines are highlighted through any obstacles when moved out of sight.

Subtitled The Age of Kings, the Regicide mode brings a faster deathmatch style of play to Age of Empires II. The goal in this is simply to kill the opponent's king or queen, while protecting your own monarch. In the traditional singleplayer mode, there are four different campaigns each themed around a historical figure such as Joan of Arc or Genghis Khan.

With the game going gold at the end of September, Ensemble is using its remaining time to tweak the AI of computer-controlled teams to make them more fallible, and complete balancing of the different units. Interestingly, it will also be making a patch available for advanced players to vary the balancing within certain limits. But whatever the standard of players enjoying it, Age of Empires II seems certain to continue to push the envelope of strategy gaming.





One new feature of the game is that troops can be garrisoned in a building, thus raising its defensive power

Format: Po

Publisher: Microsoft

Developer: Ensemble Studios

Release: October

Origin: US

FIGHTING FORCE 2

Tomb Raider's intellectually challenged stablemate returns for more kicking, punching and shooting action. This time, however, it's offering a few new twists



As sequels go, Fighting Force 2 adds a lot more than simply a set of new levels and weapons. In some respects, the game appears more influenced by Metal Gear Solid than the likes of Double Dragon. It's an interesting mix





Many weapons can be used via a targetting view. Using hands and feet isn't nearly so vital this time around

espite the criticisms levied at the original Fighting Force (6/10, E52), the game-buying public bought the title in their droves, facilitating the need for a follow-up. Edge was privy to a behind-closed-doors peak at E3, and was more than a little surprised to see how impressive the sequel is shaping up to be.

The basic gameplay and overall look are unmistakably famillar. And, as in the original, you get a thirdperson view of the lead character and have to direct him through a series of environments while kicking, punching, shooting or bludgeoning a variety of enemies. The heavy weaponry available is most notable, though, which you pick up through the game's 22 stages (set in nine locations around the globe), and you can jump and climb, allowing a fair level of interaction with the environment.

As for the storyline, it concerns international cops trying to stop an evil corporation from cloning humans. Yes, it's pure sci-fi action movie hokum which manages to squeeze every standard Hollywood shootout location – a chemical plant, a skyscraper, a prison island and a research lab – into the mould. (If the game falls, at least Core will be able to sell the film rights to Jerry Bruckhiemer.) The use of cut scenes to explain plot details should add to the cinematic

feel, although Core is keen to point out that this is not a linear experience; players can make a choice about which route to follow – a twist borrowed from Virtua Cop 2 and its lik.

And it's not all mindless action heroics. The main aspect Fighting Force 2 boasts over its former iteration is a brain. Clearly taking a hint from Metal Gear Solid, the game now enables you to employ stealth to pass enemies – you don't have to fight them. You also have to use a data handset and various computer terminals to access information at key points in each mission, and find keys and codes to unlock certain rooms – so there's greater scope for tactical play. And the enemies are intelligent, too, often running away or raising the alarm, instead of standing there getting battered, which elevates FF2 well beyond its predecessor.

Whether this new ambition towards tactical play will impress the old critics is, as yet, uncertain. From the early demo **Edge** has seen, the locations may be sharper and more atmospheric, and the animation crisp, but there remains a significant amount of 'run a bit, fight a bit, run a bit,' gameplay. Core will have to thoroughly explore its apparent *Metal Gear Solid* inspiration if *Fighting Force 2* is to work on a more cerebral level than its precursor.







Like Virtua Cop 2 and its ilk, in Fighting Force 2 players can choose which route to follow through the game

Format: PlayStation/
Dreamcast

Publisher: Eldos

Developer: Core Design

Release: October

Origin: UK

STAR GLADIATOR 2

Eccentric and extraordinary, the battiest beat 'em up in fighting game history is back, with fresh moves, fresh faces and a whole new level of visual pyrotechnics



Star Gladiator 2 allows players to pull off staggering 15-hit combos, predictably turning the screen into a hypnotic melange of psychedelic colour and chaos



The action is very much based around huge special effects. The three plasma attacks are the cornerstones of any tactical approach to the game

Format: Dreamcast

Publisher: Capcom

Developer: In-house

Release: September (Japan); TBC (UK)

Origin: Japan

very artist has his or her bizarre experimental moment. For George Lucas it was 'THX 1138', for Douglas Coupland it was 'Girlfriend in a Coma', and for Steps and Billile it was the Abba medley. For Capcom, then, it was Star Gladiator, the company's first ever 3D beat 'em up (unless you include SF Galden), filled to the polygonal brim with freaky characters, crazy lighting effects and trippy scl-fi backgrounds. It wasn't a classic, but it was different, and popular. Popular enough to warrant an arcade sequel and, almost a year and a half later, a Dreamcast conversion of that arcade sequel.

And things haven't got any less eccentric. If anything, Capcom has taken things further, pushing the futuristic theme away from 'Star Wars' and into 'Barbarella' territory. The backgrounds are flashy disco floors and Dall-esque cities, while the sound effects are 'Star Trek' on acid and the camera work is Sam Raimi circa 'Evil Dead'. Among the 22 new characters are Kaede, a female ninja, and Rai-On, apparently a new version of SG1 favourite, Bilstein. They'll be using a similar plasma-based weapon system as the fighters in the first game, with laser guns, swords and projectiles that cause massive multicoloured explosions.







There are 22 characters featured in the game, including some old favourites such as Gore with his large and sickeningly exposed brain

There are three main plasma attacks: Plasma Field, Plasma Reflect and Plasma Revenge. The first catches enemies in a force field while the second deflects enemies' attacks, making way for the third, an explosive counter attack. To make things more interesting, Capcom has added a new fighting gauge which builds up throughout the bout and finally offers a massive special attack. The game now also allows for 15-hit combos and provides vastly improved knockout sequences so you can really relish those finishing moves.

The singleplayer and versus modes are present, but for the DC version Capcom's added a Group Battle mode, where two teams of five fighters clash. But the main hook is the difference in quality between the coin-op original and home conversion. Like *Kilkaio* (see p30), *SG2* premiered on a PlayStation-based board and this Dreamcast conversion is a noticeable improvement, with a 60fps update, amazing effects, smooth animation and great character detail. The term '100 per cent faithful conversion' is beginning to look like a put down.





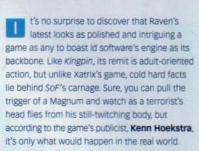
The backgrounds are pure science fantasy the perfect backdrop to futuristic laser weapon fighting

SOLDIER OF FORTUNE

A notorious pro-gun magazine licence backs up this gore-laden firstperson shooter using Quake II technology. It's a formula bound for success, if only for the shock value



Snow-suited terrorists give one of the levels a distinct GoldenEye feel, although the incredible amount of blood and gore eclipses that found in Rare's offering



Whether that justifies the extreme gore is a matter of opinion, but there's no doubt that as far as realism goes in firstperson shooters, SoF is raising the bar. While Half-Life, Sin and Kingpin relied upon heavily scripted cinematic sequences to further their storylines, SoF uses objective-based missions to fashion a hugely



New moves added to the Quake II codebase include leaning around corners





Raven's own animation code lends a truly realistic feel to the characters: far more than those found in other Quake II-engine games

involving series of tasks based around cleansing political hotspots of modern-day terrorist threats. With ex-paratrooper, Green Beret and Special Forces operative John F Mullins as Raven's adviser, it's little wonder that stealthy movement is imperative to completing the missions.

Each character model boasts an enormous number of separate animations, along with a number of localised 'gore spots'. These areas mean that every significant region of the body can be separately maimed, resulting in a wealth of interesting death animations. Extreme violence aside, Hoekstra is keen to point out the game's built-in parental lock. "It basically allows a parent to set a password in order to lock the gore out of the game," he says, before demonstrating the admittedly innocuous scenes that follow its use.

Despite his best efforts, though, SoF's success is almost certain to rest on its defiantly gun-ho approach. The profanity may be missing, but in terms of sheer red-blood-cell count, it leaves Kingpin reeling. Grotesque, youth-corrupting filth or cutting-edge, realistic shooter?

Edge believes it to be the latter, but don't expect the BBFC to see it that way.



With the emphasis on stealth, Soldier of Fortune's arsenal includes such quiet killers as throwing knives, silenced handguns and even a method of pistol-whipping your enemies

Format: PC

Publisher: Activision

Developer: Raven

Release: November

Origin: US

WILD ARMS 2

Sony's homegrown RPG returns. Seemingly stripped of its super-deformed cuteness, but resplendent with new gameplay features, Wild Arms is coming of age







The improved graphics engine of this sequel brings with it the power to deliver more detailed characters and a raft of new effects during battle





The original's SNES-style backdrops have been replaced with attractive, full-3D environments

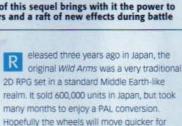
Format: PlayStation

Publisher: SCEI

Developer, In-house

Release: September (Japan)

Origin: Japan



this more 'grown-up'-looking sequel.

The action takes place in the same universe as the first title (the ancient world of Falgaia), but this time it follows the fortunes of three new characters – Ashley, Riluka and Brad. The new game also features an entirely 3D engine complete with a moveable camera, which the player can manipulate to search the landscape



The characters have now outgrown any SD trappings, and enemies have scaled up, too



The original Wild Arms was among a paltry number of quality PlayStation RPGs to make it to the UK. Like FFVIII, this sequel will be a hugely welcome release

for traps and goodies. However, during special events such as fights, the camera automatically zooms in on the action with graceful precision, in marked contrast to the clunky old 2D interface.

The control system has been adapted rather than completely torn out and replaced, however, When outside, characters can automatically search the immediate vicinity if you press the square button, as in the original. They can also run, dash, throw, push, etc – although there are expected to be more such actions in the sequel than in its predecessor.

The main change is the new 'Encounter Cancel' option. In the first title, when characters wandered into an enemy, they had no choice but to go into battle. In this iteration, players are given three seconds to cancel the battle mode and leg it, which avoids the need for tiresome bouts with obviously weedy foe. Character progression has also developed: now it's possible to collect level-up points which are used to customise and improve different facets/skills of each protagonist – rather like character points in traditional dice RPGs.

Elsewhere, the eponymous ARMs – hugely powerful weapons only useable by certain characters – will be making a comeback, and each of the three characters will have its own individual skills just as before. The key mystery is the plot – the more realistic design of this title hints at a darker, more intense story. Perhaps this will inject the 'wild' into Wild Arms.







There's always the choice to escape from a battle sequence, thus avoiding the tedium of encounters with the more puny enemies



TitaniumAngel

It's rare for a game to burst out of nowhere, unheralded and unknown. But these are often the most interesting titles. Edge visits a new developer to get the first look at one such example





Mobius' own 3D engine, entitled Revelations, offers a raft of effects at the drop of a hat. The company is in talks with other developers who're considering licensing it



Carmen has an arm attachment capable of delivering a variety of weapon effects. She'll even be able to take out enemies by sniping

original four colleagues, he faced (in his words) "practically living off bread and water" before their technology demo and game concept garnered the attention of three major publishers. SCI soon beat off the competition.

"It's a waste of time looking for quick results, because quick results end up meaning more bugs or poor gameplay later on," says Hall in reference to developer-publisher relationships. "I think we're lucky in the fact that with SCI we have a partner who's put a lot of trust in us and who is saying. "Okay, it sounds good, let's see how it goes". I think we're in our fourth month now and it's working out just like we planned."



Carmen and Titan are intended to represent a Beauty and the Beast' juxtaposition, the former offering grace as well as power, the latter simply drawing upon size and strength

Creating an angel

Titanium Angel may be in the embryonic stages of production, but the concepts behind it have been kicking around for a lot longer. And they're genuinely fascinating ideas, at a time when game development is looking tired to the point of exhaustion.

"We're trying to bring to the PC a game that encompasses all of the fun aspects of multiplayer gaming that's out there at the moment, but also developing a singleplayer game that brings together what we enjoy from console games," says David Box, the lead designer on the title.

"The main character is Carmen, a female," he continues, "and then you have the second character, Titan, a warrior mechanoid almost like a walking tank, and the gameplay consists of the working between the two.

"You get thirdperson-perspective, roaming-around adventuring with Carmen, who's fairly vulnerable and who uses stealth but also all sorts of weapons, and then you have Titan, who's slower but a hell of a lot more powerful – you're driving around in this enormous supercreature and you don't mind the enemy spotting you because you're just going in there to kick ass."

This contrast sounds strangely familiar, in a dim-and-distant-past kind of way. "Yes," admits Box, "the gameplay will pull heavily from the old *Head Over Heels* kind of approach, with two characters, each with their own special abilities, teaming up together on occasion to produce an end result."

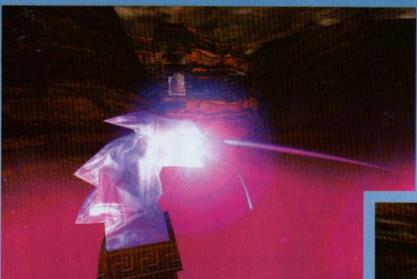
"If I give you an example," says Hall.
"You'll be going across a valley with

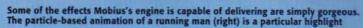
"The main character is Carmen, and then you have the second character, Titan, a warrior mechanoid almost like a walking tank. It's a matter of combining both"





The difference between environments is set to be more marked than it is in the likes of the *Tomb Raider* series, for example, calling for various approaches





Titan, and you'll find that there's some heavy ordnance out there for you to face - gun emplacements, say - the kind of thing that Carmen couldn't take out on her own - she'd have to use stealth at that point. Now, it might be that in order for Titan to progress along the valley Carmen would have to climb a rock face in order to trigger a certain event elsewhere."

Engine issues

Mobius' chill-out room (in which some staff seem to haul through a couple of packs of cigarettes a day, which has resulted in the posting of a prominent 'KEEP THIS DOOR CLOSED AT ALL TIMES' sign by one of their more sensitive colleagues) is plastered with Titanium Angel concept art. As well as groups of gloriously realised character sketches, though, there are banks of photorealistic

textures. They carry such a believable level of detail because they are, literally, real, this particular series having been scanned from photography taken at a local scrapyard. Thrown into 3D Studio and mapped on to the walls of a room, the effect is remarkably convincing.

In-game, such textures are being manipulated by Mobius' own 3D engine. However, despite being the work of essentially one coder, Justin Johnson, it's hardly the merely functional slice of code you might expect. In fact the technology demo Mobius uses to show off its features reveals some of the most beautiful effects Edge has ever seen on a PC, the progressive fogging proving particularly convincing.

Which is odd. How can a team of only 11 staff afford to dedicate time to develop its own 3D engine? Especially in light of the increased awareness



Ten of Mobius' 11-strong team gather for a photoshoot in the graveyard 'garden' outside their new office, based within the bowels of an ageing church building





of modular game design, where components can be bought in, negating the need for building from the ground up.

"We're doing almost everything ourselves," says Johnson, "although the sound libraries will be outsourced. There is a question of reinventing the wheel you have to have a very good reason for writing your own engine. And, because we're such a young company, we're not cash rich, which puts certain restrictions on licensing a seven-hundred-grand engine or whatever. So I'd be lying if I said that wasn't a factor.

"I think the most important thing is that we wanted control over the engine," offers Hall, "because we have some top talent in the company. As far as licensing technology goes, we advocate it, because at the moment. we're in discussion with two developers who're interested in using our engine for their software."

This is typical of Hall, one of the most inspirational individuals it's ever been Edge's pleasure to meet. He's only four months into TA development, but he's talking about selling 3D engines. Even through a hazy hangover, it's difficult to doubt him.























The N64 version is compatible with the Expansion Pak to give smoother frame rates

genius working individually to produce great games – it's much closer to the movie industry now."

Size is everything

With Rayman 2's production something of a 'bet' on UbiSoft's part, you might expect it to be a small-scale venture. But nothing could be further from the truth. Development has called upon the talents of 14 artists, four animators, 25 designers, four sound engineers, and nearly 20 coders – not to mention a team of between ten and 60 testers at various points throughout production. This kind of scale is relatively uncommon outside of Japan, and underlines the seriousness of the task in hand.

Despite the gravity of the thing, though, there remains an odd sense of looseness about the project's progress,

"When you see a designer watching a kid die ten times on the same bit, he just hates it. And then he starts thinking he needs to work on it"





as Jacquey intimates: "The main characters have been designed by the original conceptual people behind the game, but I have to say that when you see an idea of a game like Rayman 2, when you see it on the paper, It means nothing. You just don't know whether or not it is going to be a good idea. So we had maybe 20 or 30 main characters and then everything beyond that is about testing."

A mixed bag

Testing is something your Edge correspondent happily undertakes while a number of seemingly mute UbiSoft staff surreptitiously observe progress from behind their monitors (perhaps they're trying assess gameplaying ability, perhaps something else - it's difficult to tell). Happily, at this point in production - mere months from release - Rayman 2's myriad concepts seem to have come together promisingly. The game is patently of the Mario 64 school of design, although unlike previous Nintendo imitators, it bears many touches of originality that make you sit up and take notice. And they're not simply slippy-slidey iceword-style furnishings, either. There's a water-skiing section, for example. And a flying pirate-ship stage, in which you must navigate areas not much bigger than your craft. And levels where you're charged with piloting a rocket.

These latter sections prove instantly



Apparently, controls and camera were the most difficult parts to implement, although UbiSoft has worked out to smooth them out

appealing, and stand as testament to the personality that has gone into the game's production. The rocket itself is in fact a living character which initially attempts to kill you: upon sight, it will give chase, a pair of little legs comically protruding from its underside. Evade its attention for long enough, though, and it runs out of breath, giving you the opportunity to jump on its back and ride it like a rodeo bull. Though obviously rendered in polygons, it has a charm somewhere approaching that of a cartoon. It's also quite tricky to play.

"It's really funny, really weird," says Jacquey, "because game designers, especially when they are young, they want the game to be hard. I don't know why. I think they just want kids to spend more time on the level they are working on. So



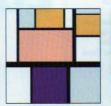
Jacquey claims that UbiSoft's coders undertook some unusual work on the N64: "We wanted to get rid of the blur effect you get when using the hardware's anti-aliasing. PlayStation games are generally more sharp, and Rayman 2 is sharper"



















There are definite parallels with the likes of *Mario 64* and *Banjo-Kazooie*, not least of which being underwater sections to negotiate

it's like... It took nine months to make them understand that having a fun game is not simply about having a hard game... So we structured the team in order to make them spend eight hours per week just watching kids playing. And as soon as you see a level designer watching a kid die ten times on the same bit, he just hates it. And then he starts thinking maybe he needs to work on it. But that's hard."

France and the art of subtlety

The world of Rayman 2 is a super-cute place, with every element that could conceivably be given some form of characterisation duly awarded some.

"I think that there is a tradition in

France," says Jacquey, "about making or writing politically correct stories for kids, and animation series for kids. So we are probably less able to be 'efficient'. When I say 'efficient', I mean, like when you play Ape Escape, and when you get to a monkey, you have this huge effect, and I think that we're kind of afraid of that in France. It's more about being sensitive and subtle and sometimes it works. I think in Rayman 2 it works on the storyline, on the animations in the graphical parts. But sometimes it doesn't work, and I think that we maybe could have done something better."

It's true. Rayman 2 certainly isn't the most in-your-face game ever. "Subtlety has advantages," claims Jacquey. "Maybe you have more feeling to give to a story or adventure. Characters seem to be more alive and have emotions and feelings. It also lets... I don't know, sometimes you just want to keep thoughts in your head and not have everything spelled out."

Covering all bases

It's no surprise to learn that, like its predecessor, Rayman 2 is to be released on as many formats as is viable. Along with the Expansion Pak-assisted N64 title there are versions promised for PC, PlayStation and Dreamcast.

But isn't this limiting? Wouldn't the doors of creative freedom be opened further by concentrating solely on one format? It's certainly the route preferred by Rare, whose recent work Rayman 2 perhaps most closely apes. "Originally the idea was to do a beautiful game, a fun game," says Jacquey. "So we didn't really consider having a technology-led game on the Dreamcast. But on the other hand we did plan the game originally for PC, at a higher resolution than the N64. And you do a much better game when you go that way, because then you don't upgrade, you downgrade. I think the N64 version is better for that, although it's true to say that the Dreamcast version might be better if we has just focused on that platform."

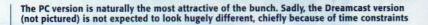
It's too early to tell whether or not UbiSoft's gargantuan resources have been stretched too far by pandering to so many formats. When the day of reckoning comes, though, that mad little rocket, on whatever platform, will be enough to put a smile on the faces of even the most jaded of gamer.



Pauline Jacquey, the producer of Rayman 2













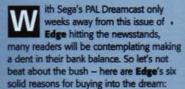


DREAMON...





Regardless of your standpoint - pro-Sega nut, Sony stalwart, whatever - this 14-page Dreamcast special, which examines the PAL launch titles, reveals Sega's in-house development progress, identifies the key incoming titles, and delivers the perspective of industry insiders, should leave you in no doubt as to the potential of a rather special console as it prepares to make its UK debut



Despite using off-the-shelf components in the form of VideoLogic's PowerVR graphics technology, Dreamcast is beginning to get into its stride. Next to titles like Soul Calibur (see p84), PlayStation and N64 software is now looking embarrassingly tame.

Dreamcast's onboard modern remains a largely untested component. Certainly, few users may look at the machine with Internet access as their prime reason for purchase, despite Sega's marketing endeavours. If stable online multiplayer environments can be built to support quality software, however, the modern issue could be a clincher for Sega. Crucially, the company is the first to market with a Net-ready console out of the box. Sony and Nintendo will be left playing catch-up from here.

According to Sega, 300 Dreamcast titles are currently in development across the globe, with 50 games set for PAL release by Easter next year. Moreover, big-name publishers such as Infogrames, Acclaim and Virgin are putting their full weight behind the format. Apart from Sega's DC-specific titles

such as Shenmue, the company also has ongoing Naomi coin-op development in hand, which will ensure a steady stream of triple-A action titles for the home.

Ultimately, games such as Soul Calibur, Ready 2 Rumble and Power Stone will ensure that the machine gets off to an explosive start in the west.

4. UK respect European developers are actively picking up on Sega's call for 60Hz support, building the option into their titles as a matter of course. What other PAL console has ever offered gamers that?

5. No competition

Sega's Saturn had to fight the PlayStation - a battle that proved a lost cause. There is no Dreamcast competitor right now. As an Edge reader, you appreciate quality. Sega's machine already offers some class-A stuff.

At £200 in the UK, or £150 on Japanese import, if it only gives you 12 months' worth of quality gaming, it's worth the investment.





FROM ZERO TO HERO?

After publicly admitting that it had made mistakes with the Saturn, Sega laid the foundations for its 128bit dream - the first of the new wave of consoles. Edge reviews the company's stilted progress from day one

FACE THE MUSIC















ack in June 1997, when the successor to the Saturn was still unimaginatively known as 'Saturn 2', Edge's first comments on the subject proved to be strikingly prescient; 'It will happen by the end of 1998 and will use PC 3D technology. And so it was that on November 27 1998, Sega president Shoichiro Irimajiri was on hand to witness Japanese stores sell out of 150,000 Dreamcasts, each equipped with a PC-style VideoLogic PowerVR graphics chip.

The presence of the company's top brass at the retail launch, as well as the high-profile Japanese TV adverts featuring Sega MD Yukawa Hidekazu, proved how serious Sega was about making Dreamcast a success. "We have the strength of a beaten company," commented its image guru Yasushi Akimoto.

Lessons from the past

Yet this high-profile launch was only one obstacle Sega had to overcome. With the western failure of the Saturn firmly in mind, it was determined not to make the same mistakes. One key problem it had to deal with was launching at a competitive global price, which required it to use as many off-the-shelf components as possible while maintaining optimum performance. The cost of additional capabilities such as a built-in modem was a thought-provoking one for Sega executives.



Sega president Shoichiro Irimajiri reveals plans for its superconsole, Dreamcast, to a select audience

One of the most intriguing of the early skirmishes, played out during 1997, was Sega's approach to choosing a 3D graphic chip partner. With the Saturn 2 project working under the codename Dural, a 3Dfx version of a proposed 'Black Belt' console was played off against the NEC/VideoLogic PowerVR-equipped 'Katana'. Few were surprised when the Japanese-led consortium won out. A more radical move was Sega's alignment with Microsoft. Dural's use of a cut-down WinCE OS

guaranteed that developers would be able to simply port titles to and from the console, at least in the early years of its lifespan. Making sure the new console's architecture was easy to code was one way Sega hoped to regain the support of developers, particularly following the problems many had experienced with the Saturn. Another involved improving thirdparty support. Sega's introduction of a 1.5-party developer status tempted European developers such as Argonaut (Red Dog), Bizarre Creations (Metropolis) and Red Lemon (Take the Bullet) to sign up for the console.

Economy drive

The first leaks concerning Katana's technical specifications came to light in October '97, when Sega's economy drive was confirmed with the use of off-the-shelf items such as the CPU, Hitachi's 200MHz SH-4 chip. Other points of interest included a dedicated Yamaha sound chip, confirmation of modern compatibility, and





Irimajiri-san (centre) and Hidekazu-san (left) joined the crowds at the console's launch in Tokyo









The first technical demonstrations of Dreamcast's power and potential were unveiled at the launch conference in May 1998. Irimajiri-san was the subject



a high-density proprietary 12X-speed GD-ROM drive. Both the main RAM and video texture RAM were listed as 8Mb.

The full scale of Sega's strategy only became apparent in April '98, however, with the announcement of the replacement for its expensive Model 3 arcade board. Entitled Naomi, it was based on VideoLogic's chipset for Katana, Suddenly a synergy between arcade, console and PC systems became apparent. And with E3 rapidly approaching, insistent rumours concerning 'programmable LCD screens built into the console's joypads' began. Another Chinese whisper suggested that the word 'Dream' would appear in the console's title...

Dreamcast and its spiralling orange logo were officially announced to the world on May 21 at Sega's presentation in Tokyo's New Otani Hotel. Sega president Irimajiri-san claimed Dreamcast would be "the system on which new videogames development will flourish." Microsoft's Bill Gates was also on hand to sing Dreamcast's praise - albeit via video.

And while the announcement was mainly a media event, the release of the official technical specs showed that Sega had needed to double Dreamcast's main RAM requirements to 16Mb during development. Sega's corporate senior VP, Hideki Sato, told Edge: "We found that if we wanted to display more than three million polygons, we had to increase the memory." The



Fuelling the hype: Sony's reign is challenged



Eager gamers queued for hours for the chance to be one of the first to own Sega's 128bit platform

modem for the Japanese launch was also confirmed as a 33.6Kbps unit, while the price was set at just ¥29,800 (£150).

A shaky start

But as the launch date got closer, things started going awry. NEC experienced problems massproducing the 0.25-micron PowerVR graphics chips and Sega had to limit pre-orders for the Japanese launch. More worryingly, key titles such as Sonic Adventure, Sega Rally 2 and Blue Stinger experienced varying degrees of slippage.

And while the launch itself was a success, Sega failed to fulfil its initial sales figures of one million units sold by the end of March 1999. Of more concern was the fact that software sales were disastrous, with only a third of Sega's predicted three million units being sold. Even titles such as Sonic Adventure and Capcom's much-hyped Power Stone were failing to generate much excitement with gamers. Conversely, Sega's free online service was far more successful, with one in three early adopters using Dream Passport for email and basic Web browsing.

With sales of the console stagnating in Japan, Sega recently had to slash the price of Dreamcast to ¥19,900 (£100), removing any profit it was generating from hardware sales. But it's not all bad news. Console sales have now picked up considerably, and the success of Soul Calibur (see p84) seems certain to raise Dreamcast's profile further. And when Yu Suzuki manages to finish his over-budget Shenmue, Sega could finally have the lavish, grandiose masterpiece it so desires.

The European and American Dreamcast launches are looking positive, too. The range of launch software is impressive on both sides of the Atlantic, and low price points of \$200 in the US and £200 in the UK have guaranteed strong pre-orders. The only disappointment has been Sega's failure to get its online gaming service up and running. It has confirmed that this will be functional by Easter '00, and both Quake III: Arena and Half-Life are rumoured to be possible big-name launch titles. By then, the next-generation PlayStation will have launched in Japan, so Sega needs to make hay while the sun shines.



Bill Gates lends his support to Sega via video









for morphing and fire effects in realtime, created by the celebrated Tetsuya Mizuguchi. A year on, the current crop of software has matched expectations

CHOOSE LIFE

















The hard stuff

The machine may contain elements once perceived to be the domain of the hazard-laden PC format, but as a console Dreamcast needs to be exceptionally stable. Edge takes a look at the new wave of Sega hardware



As first reported last month, the PAL Dreamcast unit features only slight cations from the Japanese model nt of the case now bearing the 'Compatible with Microsoft's vs CE in place of the original 'Designed for Microsoft Windows CE'. Physically, all ports, including A/V and

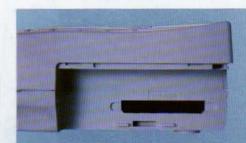


ith NTSC Dreamcast units having been available on import since the machine made its Japanese debut in December last year, the hardware's durability has already been tested just about to destruction.

Although some early units have suffered problems (one day simply deciding to no longer function, for example, rewarding the gamer with nothing but a blank screen), there have been no more hardware quality problems than were experienced with the first batch of PlayStations.

What's of more concern to potential Dreamcast owners is the design of the official joypad: it's simply not up to the task of delivering a comfortable playing experience over a protacted period. Ostensibly a revision of the analogue controllers made available for the Saturn towards the end of its lifespan, the units are not big enough for many players' hands, and the design of their underside means that callouses are not a rarity. Thirdparty alternatives should offer better ergonomics.

Along with joypads, a flood of peripherals are about to become available, some officially from Sega itself, and many more from opportunistic hardware developers who've made a committed pledge to support Dreamcast with unofficial money-spinners. The lower portion of this page offers a selection of the most important add-ons to date.



The comms component

The PAL unit arrives bundled with a 33.6K modern unit (right), which nestles snugly in the right-hand side of the Dreamcest console towards the rear device to be as easily removable as possible (in preparation for the arrival of a nippier 56K model), making it appear remarkably low-tech





Dreamcast keyboard

Price: £20

Cheap and cheerful, a 105-key unit essential for users set on maximising modem use.



Fishing controller

Price: ETBA

Only available with the Sego Bass Fishing bundle, which will retail at between £60 and £70.



■ Visual Memory unit

Price: £20

Still somewhat undersupported, but one of the most ingenious aspects of the Dreamcast setup



Arcade Stick

Price: £40

Standard-issue joypads don't take too kindly to beat 'em up hammerings. This is the solution



Racing Controller

Price: £45

Not the most solid driving accessory ever manufactured, but it serves its purpose.



Mad Catz Dream Pad

Price: ETBA

Set for launch in the US first, just one of many thirdparty joypads set to flood the import market.



Alloy Arcade Stick

Price: ETBA

Interact's unit appears at least as robust as Sega's official unit. It should be slightly cheaper, too.



Quantum Fighter Pad

Price: ETBA

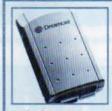
Another Interact effort. Daft name, but more suited to long sessions than the standard 'pad.



Star Fire Light Blaster

M Price: ETBA

Sega's plans for selling its own lightgun separately are currently hazy; look for this on import.



■ Vibration Pack

Price: £20

House of the Dead 2, support will escalate in coming months.



Dreamcast powers up

It's no surprise that Sega's own technicians are managing to coax the most impressive imagery out of Dreamcast. A new *Shenmue* demo arrived at **Edge**'s office this month, and succeeded in dropping jaws

o hardware format shows its true potential via the first wave of software produced for it, and some early Dreamcast titles have certainly failed to show Sega's new format in a favourable light. However, the huge group of Sega developers, led by Yu Suzuki, working on showcase DC title Shenmue are making enormous strides with the format.

The latest demo reveals never-before-seen levels of Dreamcast graphical detail. The taster allows users to select four of the game's characters (including the lead, Ryo), bringing their visages up onscreen to deliver a bundle of Shenmue-related dialogue. Forget audio, though – it's the visual quality that matters here: these 3D models, which can be zoomed and panned around in real time, are absolutely breathtaking, rivalling prerendered quality at certain points. The female characters' flowing hair, in particular, sets a new paradigm for realtime graphics on a home format.

















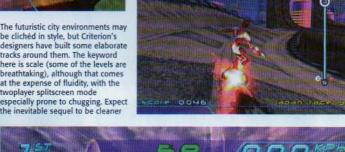


Trick Style

■ Publisher: Acclaim ■ Developer: Criterion ■ Price: £40 ■ Release: September 23



be clichéd in style, but Criterion's designers have built some elaborate tracks around them. The keyword here is scale (some of the levels are breathtaking), although that comes at the expense of fluidity, with the twoplayer splitscreen mode especially prone to chugging. Expect the inevitable sequel to be cleaner











orn from a number of experiments undertaken by developer Criterion, Trick Style has metamorphosed into one of the most significant launch titles for Sega's machine in the UK - not least because it is one of the titles that does not rely upon building on, or even simply copying, existing concepts in order to work.

Acclaim's game is a success on many counts. First, it takes a largely untested premise futuristic hoverboarding - and conspires to deliver a convincing replication of what you might imagine such a preposterous pastime would appear like were it physically possible. It does this by not simply building gameplay physics around the player's hoverboard itself, instead attempting to represent the relationship between 'boarder and his mode of transport, his or her body swaying and squirming as joypad input is fed into the console. The resulting visual effect is somewhat reminiscent of that of Nintendo's 1080°, albeit exaggerated to the nth degree.

Second, the game presents a well-realised game world, split into various sections from a central hub where you're given the opportunity to complete challenges in exchange for new tricks to add to your repertoire. Over the three differently themed race areas - UK, US and Japan, progressively increasing in difficulty in that order - you're charged with conquering five tracks before facing a boss-race encounter. This setup is essentially cribbed from that of Diddy Kong Racing but is no worse for it.

Nine characters are available for selection, broken down into three different categories racer, stunter and bully. Their classes give a natural indication as to their predilections out on the tracks, and opting for a particular style naturally has a significant effect on performance.

The landscapes your 'boarders get the opportunity to sloosh their desired style over are a mixed bag, with some levels proving significantly more accessible than others. However, all give the opportunity to integrate outrageous manoeuveres within the races proper - an aspect that will be relatively foreign to 1080° devotees accustomed to reaching finish lines in the shortest possible time.

However, while Trick Style's structure holds together well, its learning curve proving convincingly sound, it fails to convince as a true next-generation title. The scale of its levels may astonish at points, but it's not uncommon to encounter slowdown and an element of fogging while negotiating them. Trick Style was always intended to be a UK launch title, and as such it carries with it a faint whiff of rushed development. In terms of final polish, it's leagues away from the likes of Soul Calibur (see p84), for example.

Regardless of such quibbles, however, it remains a key PAL release, offering a refreshing slant on the racing genre.

Eight out of ten

Trick Style naturally fails to deliver the 'solidity' of something like 1080°, but,

once accustomed to its

nuances, you'll discover a convincing game in there



The UK launch line-up

he wave of releases available to purchase alongside a PAL Dreamcast upon its launch this month represents a mixed bag, but Sega has at least attempted to offer a fairly broad selection of game styles

Sonic Adventure (8/10) leads the pack, as Sega looks to reaffirm the eponymous hedgehog's iconic status. The PAL version has not been overhauled, merely tweaked, most of











From top: Blue Stinger, Monaco Grand Prix Racing Simulation 2, Speed Devils, Incoming, and Expendable – five debut titles guaranteed not to make a big dent in early sales charts

the jarring camera problems of the NTSC original having been ironed out and graphical glitches papered over. Though it's a victim of QCS (quick conversion syndrome - something that a number of early PAL releases suffer from, resulting in borders and a drop in game speed from the original format), it remains an attractive example of Dreamcast's capabilities. Essentially six games stitched together (one for each character), it's something that can only truly be appreciated after lengthy play, with later levels offering more challenging and rewarding gameplay, plus some of the grandest, most impressive visuals yet seen on the format.

Virtua Fighter 3tb (8/10) is one of a pair of beat 'em ups Sega is making available from day one, and its wealth of characters and finely tuned gameplay make it a serious game. Though it too suffers QCS, Sega is at least believed to be including a VS mode (something not available to test at the time of writing).

An even more convincing fighting game is Power Stone (9/10), Capcom's glorious dabble in the realm of free-roaming 3D. With a fabulous selection of interactive backdrops (there really is nothing to come close to plucking a lamp post out of the ground and clonking your opponent with it) and characters showcasing Capcom's typically high level of detail, this is an extravaganza of a game.

Sega Rally 2 (8/10), however, may well disappoint the legions of fans familiar with Sega's glittering catalogue of racing titles. The NTSC original clunked along in places, so it's no surprise to see this QCS-laden release struggling to do justice to the hardware it's running on in places. There's still a sound game in there at the core, however, and it will be the strongest driving title available on official release for some time.

It's better than Monaco Grand Prix Racing Simulation 2 (6/10), for example. To its credit. UbiSoft has made some modifications for the Euro release, including slightly upgraded graphics (tarmac detail is now - wait for it more varied, for example), but the game still fails to look and play like something Sega's machine is capable of.

With Sega unable to supply PAL code of Blue Stinger (5/10) as Edge went to press, it remains to be seen just how many amendments have been included. The awful camera work of the Japanese original is reputed to have been significantly re-jigged, but the more fundamental weaknesses of the title (its linearity, for instance) cannot be enhanced.

Similarly, PAL review code for Expendable (PC: 5/10) is not yet available, although the direct-port nature of the title means that you won't be missing much by passing it over. Incoming (PC: 8/10) is a more interesting option, although it has dated considerably.

Finally, Speed Devils is the complete mystery of the bunch. Review next month.









From top: Sonic Adventure, Virtua Fighter 3tb, Power Stone and Sega Raily 2 – the cream of the launch crop, and all worth some consideration



Incoming the DC titles to watch

Sega may claim that 300 Dreamcast titles are currently in development, but, as with games for any platform, only a select number will be worth checking out. Edge presents some early potential highlights from the pot

Ready 2 Rumble





his is the one - the game that Sega Europe's internal appraisal types are currently glued to from dawn till dusk. Once perceived merely as a filler title, Midway's lighthearted take on the boxing theme is preparing to prove its doubters wrong. The fundamental gameplay aspects are reassuringly solid (think Super Punch Out!! with 3D bells and whistles), while the managerial content, in which you sign and train boxers towards challenging for three title belts, could be the icing on the cake. Could even take Soul Calibur's crown.

Dead or Alive 2





n terms of top-quality output, the legacy of Japanese softco Tecmo is hardly the stuff of legend. It struck gold with the original Dead Or Alive, however, the blend of tight, Virtua Fighter 2style gameplay and brazenly saucy imagery lighting the fires of beat 'em up fans worldwide. The sequel is naturally adept in the visuals department, while a new tag-team option and multi-layered fighting environments promise to deliver gameplay depth to overshadow the rather cynically engineered risqué content.

Alone in the Dark 4



lead on PC, but







aving sat on its laurels while the Resident Evil series has cleaned up by taking the opportunity to make the survival horror premise its own, Infogrames faces an uphill battle in making a splash with its fourth Alone title. Unlike its predecessors, however, this instalment aims to make some use of realtime background details, which will certainly set it apart. Being developed simultaneously alongside a PC version should not hamper the potential of a hugely welcome Dreamcast adventure game.

Ecco the Dolphin





adly, Edge's experience of Appaloosa's dolphin sim is limited to witnessing Sega's E3 video and receiving secondhand reports from European contacts who've had the opportunity to experience the game at close quarters. Certain aspects appear shaky at present (and the developer does not have a sterling reputation), but word remains optimistic, suggesting that, given the necessary time to apply spit and polish, this could be one of the hottest Dreamcast titles to appear early next year.



Snow Surfers





ith the likes of Nintendo's genre-defining 1080° in existence, Japanese developer UEP has found it difficult to deliver a snowboarding title to convince a multiformat-aware audience, but the opportunities freed up by Sega's hardware ensure that the company does not have to worry about grinding a convincing 3D engine out of an ageing format (which it had to with its last title, PlayStation Cool Boarders 3). It can instead concentrate on streamlining gameplay. Refinement will take the place of any major reinvention.

Metropolis Street Racing





ollowing a less-than-ecstatic reception at E3 (where it was expected to make an enormous splash), MSR seems set to remain in the workshop for serious engineering work for some time yet. There's no doubting the care developer Bizarre Creations has taken when building the game's varied, ambitious cityscapes - indeed, visual concerns aren't necessarily an issue at all - but some serious gameplay tweaks are believed to be being implemented in order to make the game realise its patently obvious potential.

Hydro Thunder





ike its spiritual forebear San Francisco Rush, Hydro Thunder kicked up something of a noise on the coin-op scene, its no-brainer, adrenaline-pumping gameplay proving ideal for such an environment. The home version promises to deliver a satisfyingly close rendition, with transglobal settings including Egypt and New York rendered with appropriate fluidity. The Dreamcast version will feature at least one new track and a convincing twoplayer splitscreen mode necessities given the nature of the game

Crazy Taxi

In-house (AM#3) Release: TBA





ega has yet to officially confirm its plans to bring Crazy Taxi to the home, although insiders recently told Edge it is merely a matter of planning the conversion into the company's hectic internal development schedule. Which is absolutely wondrous news for Dreamcast owners, for, as any arcade goer worth his or her salt will attest, this is one of the nuttiest yet downright outrageously entertaining driving games ever conceived. The potentially long wait for the Dreamcast version will most definitely be worth it.





Subtitled Cult of the Wyrm, this is coming from the creator of Die by the Sword







Castlevania: Resurrection

■ Publisher: Konami ■ Developer: In-house ■ Release: Early '00





et in the year 1666, Konami's continuation of the Castlevania legend is being assembled in Konami's US development facility. The team behind it claim that their game will not reproduce the exploratory feel of the fairly recent N64 version, instead opting to replicate the action-combat feel of that of SNES title Castlevania III. With an update promised not to fall below 30fps, five stages each broken down into around ten areas, and approximately 40 enemies intended for the finished build, this could be a key DC title.



Sure, it's a 3D platformer, but it's from talented Brit developer Bizarre Creations

Rainbow Six



This respected actionstrategy title is shaping up well in Dreamcast form

Max Payne



Another PC port that's some way off, Payne could out-action 'The Matrix'

Toy Commande



A change of direction for No Cliché, this charming actioner is worth watching

Red Dog

■ Publisher: Sega ■ Developer: Argonaut ■ Release: Late '99





rgonaut has little or no history with racing games, but Red Dog is not intended to follow in the footsteps of any particular genre leader. Instead, the game appears to play up its potential for multiplayer action, with a selection of varied two- to fourplayer options. The developer also has plans to deliver a networked option – under the tentative guise of Red Dog Arena – via Sega's stillembryonic online gaming network. Those who've sampled the title to date report that it's a stupidly addictive multiplayer title.

MDK 2

■ Publisher: Interplay ■ Developer: Bioware ■ Release: Early '00





Ith the developer of the original game, Shiny Entertainment, apparently too tied up with other projects to commit to a sequel, duties have failen to Baldur's Gate creator Bioware. And the outfit appears to be fashioning a convincing update, offering three playable characters (although who will favour assuming the guise of a dog remains to be seen) and a raft of environments whose structure appears more varied than those of the first MDK.

Less emphasis on sniping combat should make for more direct action this time around.

Shenmue

■ Publisher: Sega ■ Developer: In-house (AM#2) ■ Release: TBA





he playable demo that recently arrived at Edge's offices from Japan gave ample opportunity to sample Shenmue's considerably varied nuances. And, if it's not necessarily been a revelation in gameplay terms (the Japanese text rendering progress stilted), it has at least provided the most convincing testament yet to those early claims of Dreamcast's graphical potential: it looks absolutely gorgeous. It's still too early to tell whether or not the whole thing will gel together convincingly, but signs are positive.



An audience with Yuii Naka

As Sonic prepares to make his long-awaited 128bit debut in the west, Edge caught up with his legendary creator at his R&D development facility in Japan to mull over the qualities of his most ambitious project to date

Edge: What do you think western gamers' reaction will be to Sonic Adventure?

Yuji Naka: It's difficult to say. This time, Sonic is less action-oriented, and numerous adventure parts have been included. I hope players enjoy them.

Edge: What improvements have you been able to make for the western version?

YN: Basically, there are no big differences to the Japanese version. We tuned up some parts, and reviewed some camera views, rectified some bugs and simplified a few bits.

Edge: How did you handle the localisation?

YN: It was no different from the way we translate other games. We worked on different nuances and made characters speak in a very 'Sonic' way. We did some auditions to find the voices for Sonic and the other characters. We taught the 'Sonic voice' for various Sonic personalities and directed it. We also translated the game into French, Spanish and German.

Edge: How long did it take to complete the conversion?

YN: That's difficult to answer because we didn't work on it full time. We started work on it after finishing the Japanese version, so it took probably four months. We needed to modify lots of Japanese text as there are so many pieces in Sonic Adventure

Edge: Where do you look for ideas when you're developing a game?

YN: I think the best thing is to talk through your ideas with someone else and get their reaction. By taking into account other people's reactions, you progressively build up your game concept.

Edge: Which aspect of Sonic Adventure proved to be the hardest to implement?

YN: The most difficult thing was working on new hardware - adjustments were difficult to make. The whole team was working on the same floor, so when someone in a booth had a good new idea, all the neighbouring staff were really excited about it. Everybody was really impressed and excited by the possibilities of Dreamcast.

Edge: Does the final Sonic Adventure come close to what you initially envisaged?

YN: Globally, the game is very close to what we

originally planned. However, the end result is much bigger than we first envisaged it.

Edge: How big was the development team?

YN: At its peak, for about two months, we reached 130 persons, but normally the team was about 50 people strong. We had almost 20 times more staff for Sonic Adventure than we were used to - we were a team of seven people when we did the original Sonic

Edge: Which Sonic instalment was the most enjoyable for you?

YN: On the first Sonic, I was the main programmer and I was also doing the direction, which was enjoyable because I could create a game from scratch without limitations. This time, with more than 100 people, things were very different, I don't want to work in such big teams any more. It is enough to do it for a few years.

Edge: Just looking at the Mega Drive instalments, what is your favourite Sonic?

YN: The one I like best is the first Sonic the Hedgehoa: But the most developed title is Sonic 2. It's a difficult question, though. I love all my games. I've worked on more than 20 titles already

Edge: Which part of Sonic Adventure are you most proud of?

YN: I am most satisfied with the game's scale. Sonic Adventure offers a huge world and many different game experiences. It is what I wanted.

Edge: What's next for Sonic Team? Is it true that it will be broken down into small units?

YN: I can't talk about it. There are lots of rumours, which I believe often come from players who want to have part two of Sonic Adventure, Burning Rangers and NIGHTs. So the rumour that the Sonic Team split into three teams appeared on the Net. I don't want to ruin any dreams, but I am making none of them.

Edge: Is there a lot of Internet interest in Sonic in Japan?

YN: Yes. There's Sonic-Chat for example. I connect there sometimes. It's very interesting, I can get lots of opinions from players.

Edge: Which Dreamcast games are you looking forward to the most?

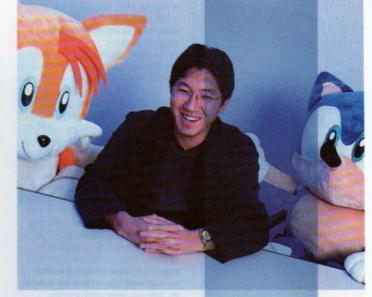
YN: Shenmue and Seamon, surely. Vivarium just finished it yesterday. It is software that people absolutely must buy. New concept-based games are what I want to see.

Edge: Why did you enter the game industry?

YN: I was interested by computers. I was also influenced by Ryuichi Sakamoto's group YMO and its synthesisers. When I heard that Ryuichi Sakamoto would make the musical Dreamcast logo I was very happy, as I had to create an animated logo to go with it. YMO influenced numerous game developers in Japan - not only me, they were a very big influence on my generation.

Edge: Do you get a chance to play games?

YN: Yes, on all platforms, I played a little bit of Metal Gear Solid Integral that I got from Hideo



Kojima. I also played Capcom's Marvel on PlayStation and I bought Shutoko Battle for Dreamcast and Saru Get You on PlayStation.

Edge: In your opinion, what will make Dreamcast a success in Japan?

YN: I believe network games are important. Graphics are not the be-all and end-all when it comes to gaming.

Edge: At the planning stage of Adventure, did you want to make it networkable?

YN: Yes. I wanted to make an online game, but I thought we couldn't do it in time for the release, so we abandoned the idea, Instead, we made Sanic Adventure a networkconnectable type of game. But I am really satisfied with the result because I could implement some original networking features even if the game is not online.

Edge: Who is your favourite character in Sonic Adventure?

YN: Sonic, of course, I also like Chao, the small A-life characters similar to the ones we created

Edge: What do you think of PlayStation 2?

YN: If the PlayStation 2 was less powerful than the Dreamcast then people would laugh. You need to make people dream, but I don't believe graphics are everything. And I don't think it's normal to spend so much money on such a huge project to reach children. I think we should make cheap and enjoyable games for children.

Edge: How do you see the future of videogames developing?

YN: It's difficult to say. Recently games have been so graphics-oriented. But games with good graphics are not always good games. We need to go back to the origins of gameplay.







The industry litmus test

Edge spoke to five industry insiders, including four senior development figures and the editor behind the most widely read videogames trade weekly publication, to gauge confidence in Sega's 128bit dream format

m Jez San

m MD, Argonaut

Edge: What do you think of Sega's progress to date?

JS: They've struggled along, what with the slow take up in Japan, and even slower arrival of decent games (but, thank god, they're finally coming), not to mention most, if not all, of the European-developed games running late.

Edge: How important do you think the PC development community will be to Sega in the long term?

JS: Reasonably important in the short to medium term, especially when the similarities between PC and DC are taken into account (similar architectures, similar 3D graphics chips, similar performance, similar OS, similar connectivity, etc) with the promise of quick access to some decent games. In the long term, PC-developed games ported to DC won't make any difference. Either DC is successful in the next two years, or it isn't.

Edge: Does Dreamcast have enough development support to make it work?

JS: Sega has a great batch of arcade conversions and native Naomi arcade games (can't wait for Crazy Taxi), and a fair amount of new games (Code Veronica, Ready 2 Rumble, Red Dog, etc.), but it's not got full support from all the publishers in the way the PSX2 has. But I think they've done fairly well. And It's quite straightforward for the PC guys to port their Quake clones. To get more decent games on the system earlier, Sega should be cutting highly leveraged and big-incentive deals with publishers to get their support now, 'cos few want to support the losing side and Sony looks to be the winner by default.

Edge: What do you think of the console's out-of-the-box connectivity?

JS: Sega 'owns' multiplayer gaming on home consoles, but the first decent multiplayer games won't ship until next year. The point is, it does offer a low-cost route to the Internet from the home, it does have a built-in modem, and it is trying to reposition itself as sega.com. I reckon they're playing their ace card and good luck to them, if they can capitalise on DC's connectivity and closeness to PC architecture, it might just make the mark!

Edge: What happens when PS2 arrives?

JS: The PSX2 and the DC both have their strengths. The great news is that they are very different machines, so don't expect to see many of the same games on both. It'll be up to the gamers to make their choice. Sony will say that its machine is far more powerful than the DC and, if you program it a specific way, for certain things it is. And DC will be better at some things than the PSX2. Variety, or perhaps even diversity, is the spice of life, right?

Edge: And in the long term?

JS: If Sega plays its trump cards all the way – multiplayer, Internet, low-cost PC-style gaming – then I think it has a shot. But there are many ways it can really fuck it all up. And the other guys have got a lot more cash and potentially far superior machines (at certain specific things) than Sega to make things really exciting, Having huge management shakeups down 'to the wire' in the US can't help, can it?

E Steve Crane

■ Senior VP, Activision Studios

Edge: What do you think of Sega's progress to date?

SC: There clearly was a pent-up demand on the part of developers to create more sophisticated content. We're seeing some great early games, like Soul Calibur, Ready 2 Rumble, and our own Vigilante 8: 2nd Offence and Toy Story 2. It took a while before developers were able to do as well on the PSX and N64. The platform is a good, clean design

machine that it may take a while for developers to fully exploit its potential. DC's best chance for long-term success is if it builds a constituency in one or two well-defined categories (as the N64 has done with games for a younger demographic).

M Gary Penn

E Creative manager, DMA

Edge: What do you think of Sega's progress to date?

GP: Sega's got its work cut out to establish DC as a must-buy, bolstering player curiosity and confidence and re-establishing itself as a worthwhile brand in the process. In fairness, Sega's pulling out all the stops, but the massmarket already has PlayStation and N64

"If Sega plays its trump cards all the way – multiplayer, Internet, low-cost PC-style gaming – then I think it has a shot" Jez San

that's relatively easy to develop for.

Edge: How important is the PC community to Sega in the long term?

SC: I don't think that Windows CE will be the operating system of choice for very many developers. And Sega doesn't want to see a lot of PC ports. Even so, the capabilities of the DC are closer to those of a PC with a 3D card than to existing console systems. Some categories of PC games are viable on both PC and console (sports, racing, and firstperson shooters come to mind). Developers of PC games in these categories should be able to make the transition easily. How many will, well, that I really couldn't tell you right now.

Edge: Does Dreamcast have enough development support to make it work?

SC: A lot of developers are taking a toe-in-thewater approach, but it'll need solid support from all the major publishers to make a go of it. It took the N64 a year or so to get that level of commitment. I expect the same will be true of DC. If the installed base develops, games will follow. It's in Sega's interest to get a bunch of good games out quickly. It should do everything in its power (including subsidising development) to make that happen.

Edge: What do you think of the console's out-of-the-box connectivity?

SC: Hard to say. I haven't heard of any musthave titles that use the modern yet. Again, if the installed base develops, those titles will surely come. It's a good decision to have the modern as a standard component, though. If it were a peripheral, the critical mass to support multiplayer titles might never develop.

Edge: What happens when Sony releases its next PlayStation?

SC: It can survive with enough installed base and a couple of dozen high-quality games. PSX2 games will ultimately look better than DC games, but the PSX2 is such a complex



and a wealth of software. The PlayStation has quantity and the Nintendo 64 has quality. DC is likely to end up considered no more than quirky. Sega's making extensive use of the bright, strong icon - not a geometric shape (or collection of them even) but a simple, hypnotic spiral comparable in quality (and 'memorability') to Sony's iconic branding. But what else? As a player, why should I care about the DC? Because I can race in a Sega Rally instead of a Colin McCrae Rally? Because I can have an adventure with Sonic the Hedgehog instead of Mario the plumber or Crash the Bandicoot? Where is the irresistible urge to buy DC? When it comes to the crunch the programs always come first.

Edge: How important is the PC development community to Sega?

GP: It's certainly useful in the short-term, to help establish a more fulsome software library. Developing for the PC is a pain in the arse at the best of times, so the possibility of yet another version of the same software, but for another platform and for minimal additional effort, is alluring. Even so, the conversion process isn't a simple matter of scooping out one shell and dumping the contents in another. The digital toyset has to be crafted from two different materials, and the more dependent the toyset on the abundance of PC fabric, the more work is required to rework it.



to suit DC fabric. It doesn't help that while the DC technology stands still, PC technology continues to accelerate. No matter how much Sega relies on the PC development community, Sony has an extensive PlayStation development community to continue its existing work on PlayStation and extrapolate when ready.

Edge: Does Dreamcast have enough development support to make it work? And what should it be doing to bring more properties to the format?

GP: Properties such as what? The wealth of sequels on established formats? A more accessible price point for hardware and software? Sega needs digital toysets that are only accessible through DC. Or perhaps a miracle tool suite to make it easier to build and exploit digital toysets in the first place.

Edge: What do you think of the console's out-of-the-box connectivity?

GP: On the face of it, convenient console connectivity is exciting: the possibility of playing games against remote opponents, perhaps for the first time ever; whole new worlds out there waiting to be discovered, most of them beyond what is considered the console's traditional function. But then what? Emailing friends? Trawling the Web for muck that can't be stored locally? Tying up the telephone line for hours on end and running up ever-increasing bills? Arranging meetings in virtual space and competing in clunky representations of evolution – imbalance fights to the death? Whoopee.

Just as in the real world, too many players can spoil the fun; too many extreme, inept or unpredictable players can spoil the fun for those who take it all too seriously. (Who can GP: It will enjoy cult success. But who beyond the affluent and the hardcore needs one? And as anything other than a stopgap until PSX2?

- III Demis Hassabis
- # Founder, Elixir Studios

Edge: What do you think of Sega's progress to date?

DH: A lot better than many expected, it should have probably started pushing the format a little earlier. It had a good E3, though.

Edge: How important do you think the

PC community is to Sega?

DH; We'll continue to see a lot of ports from PC to DC simply because it's relatively easy. While this extra support can't be a bad thing, it won't be those titles that make or break the machine, it will be the games that are exclusive to DC, games like Shenmue.

Edge: Does Dreamcast have enough development support to make it work?

DH: DC does have an impressively large roster of thirdparty developers. I think Sega has learned from its mistakes with the Saturn. At the end of the day, no matter how good your machine is, it's the games that count. On this front Sega is bending over backwards to help developers as much as possible.

Edge: How much support will Elixir offer?

DH: We're watching events carefully. We're looking into the technical implications of converting our first title to the format.

Beyond that, who can say?

Edge: What do you think of the console's out-of-the-box connectivity?

DH: I think that DC's online support is the single most exciting thing about the machine.

prospects of Sega's new machine?

DH: Much better than I first thought, but Sega still has a very tough battle ahead. It really depends on two things. First, it needs to get its killer app games, like Shenmue, out in time. Second, it depends on whether these games are as groundbreaking as they're promising.

- B Stuart Dinsey
- M Editor, MCV

Edge: What do you think of Sega's progress with the format to date?

SD: Globally, it's been a slow start and some developers seem to have made their minds up already, which is a worry, in the UK and Europe, the machine still has a window of opportunity. The people in charge haven't done a lot wrong and consumer demand is definitely building.

Edge: How important is the PC community to Sega in the long term?

SD: I don't think that this 'box' is the be-all and end-all of the DC brand. PC developers could be key, but they need to be wooed a little more than they have been to date.

Edge: Does Dreamcast have enough development support to make it work?

SD: Sega knows it can make very good games itself and likes to control secondparties (for 'co-published' games) rather than invite in countless thirdparties. I think Sega wants to make as much money as it can from DC software, so you can sort of understand it wanting to dominate the software available. Sega Japan also still doesn't understand the importance of the European development sector yet – or European gamers' demands for Euro-developed titles.

Edge: What do you think of the console's out-of-the-box connectivity? World-changing console component, or folly that will fail to garner support?

SD: Not world-changing, but also not folly. If you were launching against the PlayStation, wouldn't you highlight the bit that's different? Edge: What happens when PS2 arrives? SD: I think this is DC v1.0 and the technology

SD: I think this is DC v1.0 and the technolog will evolve. Sega's links with Microsoft and, more recently, 8SkyB point to the future.

Edge: And in the long term?

SD: The important thing for Sega is that this traditional box launch version of DC is successful enough to provide a launchpad for Sega into 2000 and beyond as a format owner. If not, as everyone has been saying for so long, it could end up being just a games developer itself. I think there are enough huge companies out there, who don't want Sony to have things all its own way, for some very interesting partnerships to emerge. But DC must position itself as a format for the future, one that can be shaped and moulded to the needs of the consumer, not just an interim games console that fills a hole for a few gamers until Sony and Nintendo blast back with new systems next year.

"It's hard to see Dreamcast as anything other than a Milky Way: a snack to consume between PlayStations – without ruining appetites" Gary Penn

forget the selection process in school team sports with the final, pitiful choice of unfit misfits?) It's not an issue of how many players but the right kinds of players. What about the unfit – those without highly developed 'virtual awareness'? How do we cater for the novice and the hardcore in the same? Segregation? A class system? Artificial opponents – carefully considered and choreographed players – are far more controllable and potentially balanced than real people and could be built to ensure that players more often than not have a good time. It really is the taking part, not the winning or losing that counts.

Edge: What happens when Sony releases its next PlayStation?

GP: It's difficult to see DC as anything other than a kind of Milky Way: a snack to be consumed between PlayStations – without ruining appetites.

Edge: Overall, how do you see the machine's prospects?

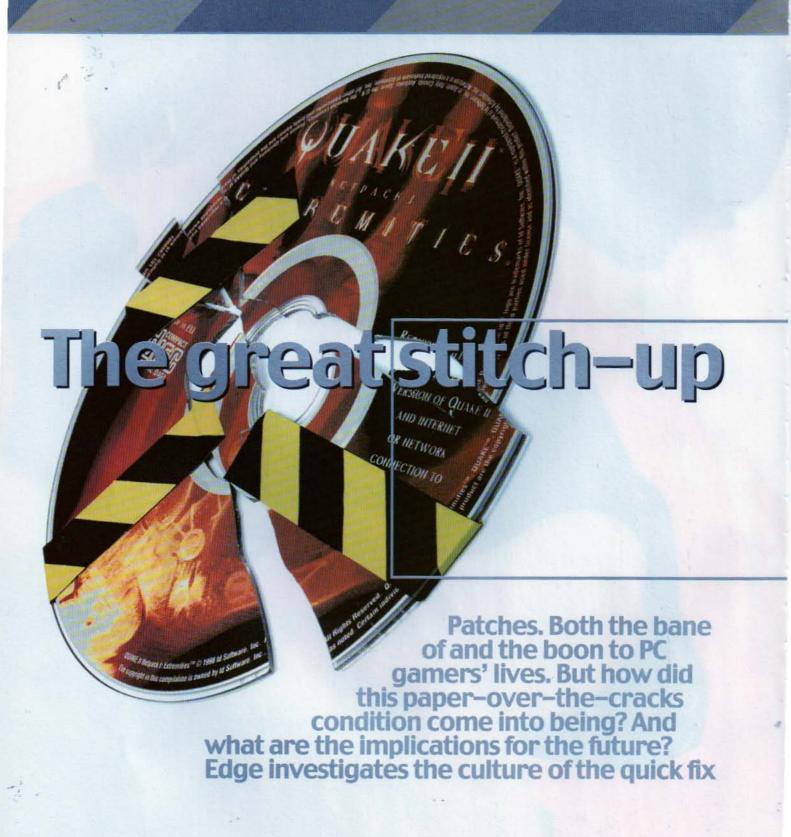


If Sega makes full use of this it could be the key to its success. However, it needs the right games to take advantage of this capability and I'm not sure they have this from what I've seen so far.

Edge: What happens when Sony releases its next PlayStation?

DH: It's going to be a very tough time for Sega. I can't see Sony losing their grip on the games market.

Edge: Overall, how do you see the





By any rationale, the PC remains the least accessible gaming platform. But, make no mistake, publishers and, to an arguably lesser extent, developers are guilty of perpetuating this sorry situation. Given the choice of tweaking an unstable beta or meeting a publishing deadline, many software house execs almost forget the gold disc in their haste to reach the duplication plant. From their perspective, there is no great quandary. The penalties for missing an in-store deadline, after all, far outweigh almost any degree of buyer ire.

The point has been made before, and it remains a quintessential truism: dedicated gamers are a remarkably forgiving breed. Faced with what is, in effect, a bugged beta, many are inclined to stoically wait for a patch, via Internet or covermounted CD. Such people – and Edge recognises its position among their ranks – are often irked by the task of wrestling Windows into shape or

downloading fresh drivers

boom, console manufacturers – led by Nintendo's inaugural example – have been keen to maintain a reasonably high level of standards. A graphical glitch may be forgiveable (especially with the ageing 32- and 64bit consoles), and a gameplay flaw open to subjective debate, but a crash bug borders on the criminal. Indeed, Sony, Nintendo and Sega understand that, while poor software is a problem, bugged (or generally glitch-ridden) games could have an irreparable effect on the reputation of their machines.

Suffering in silence

There is no one entity to blame if a PC game is bugged, and no real recourse to be had. If an Eidos game is rife with glitches, will a gamer boycott future releases? Of course not. The insidious, awkward nature of this problem is that — bar the occasional few who can't get a title to run at all — a bugged game can still be played and enjoyed. Its pre-fix flaws may be frustrating, and cast a pall over proceedings as a whole, but they remain impediments rather than outright disabilities.

If examples of games that needed extra time in development nust be cited, rather than an after-release



Dedicated gamers are a

ceroarkably forgiving breed. Faced with what is, in effect, a bugged beta, many are inclined to stoically wait for a patch

in order to play a game. They can, so they will', appears to be a rallying cry for publishers too numerous to mention.

There may be a few complaints. And yes, the consumer helpline staff might learn to loathe the merest mention of game X. But with few tangible consequences that a software house can reliably measure, patches—in their eyes—aren't merely the executables that repair bugged copy. They are the device that removes a potential hiatus between developer and duplicator.

Plaguing platforms

Historically, crash bugs have blighted a shocking proportion of computer software. Having observed this, and the obvious mistakes made during the Atari overhaul, then Battlecruiser 3000AD must open the proceedings.

Three things marked out Gametek's space combat sim as a game to remember: its sheer scope, its complexity, and its bugs, although not necessarily in that order. After numerous fixes, it was finally wrestled into a stable form. Of course, by this point its active shelf life had long since expired. It's interesting to note that its developer later regained full copyright and the entitlement to market the product - the original contract, and the tale of how that happened, would no doubt make interesting reading - and has offered the full (patched) game to various PC magazines. The latest news is that Battlecruiser was to be made available as a free download. As one wag



Geoff Ren

Head of QA at SCEE, Rens is surprisingly sympathetic with his peers in the PC marketplace, as Edge discovered... Edge: Why does console game QA appear to be more thorough than its PC equivalent?

GR: It's a bit of an unfair question. really, because PC games are generally aimed at a different market, especially with regard to age. There are good and bad games on both formats, however the console user may end up with a game less likely to contain problems. The main reason for this is the use of patches, etc. because of the huge amounts of different hardware specifications and all of the various drivers and their updates. In some cases a patch may be required only because of a driver update and is not down to a problem with the actual game. It's virtually impossible for PC developers to make their titles run flawlessly with every type of hardware.

Another point is that because of the compatibility problems PC developers have always had, the average PC gamer now accepts the situation and is not surprised when a patch is required. Although they may not like it, they possibly accept this as a fact of life, and unless PC specifications become standardised, I doubt whether it will change.

Edge: Do you feel that, if the option existed to use patches with console games, publishers would abuse that fact?

GR: it's probable this could happen, although I'm sure none of the PC developers/publishers wish their titles to hit the shelf containing problems. However, there are numerous issues other than clean game code that may have to be taken in the decision to release a title. By answering a definitive

'yes' would be extremely unfair when you don't know all the facts.

Edge: What steps, in your opinion, are needed to improve the overall standard of PC games (in terms of stability, not requiring patches, etc)? Can publishers and developers of PC titles learn from their console-oriented peers?

GR: As before, unless PC compatibility becomes standard, I don't feel the issue of patches and stability will ever go away completely. This is the one big advantage that the developers/publishers of console-based games have; they don't have to worry about compatibility and they have set standards to adhere to, making It much easier. If PC gamers are so unhappy with the situation regarding PC titles and patches, maybe they should consider purchasing a PlayStation...

exclaimed at the time: "If they'd done that in the first place, and charged for the patches, they'd have made a mint"

If Battlecruiser 3000AD is infamous, Ritual Entertainment's Sin has become a legend in its own load time. Its original commercial release, notwithstanding crash bugs and other issues, rivalled 8bit tape-based 'multiload' games in terms of delays between levels. To boot a simple cut scene would take an age; the sheer agony of staring minute after minute at an inert screen simply beggared belief. It did, after all, use the Quake II engine. And Quake II isn't too slow to load, is it?

It was unfortunate that forays into Sin's mid-to-later levels were near unbearable. The reason was simple: they were, proportionately, more difficult. To return the player to their last saved point, or the start of the level, it would seemingly reload the entire level. To fix this (and many other) problems, players were required to download an 18.57Mb executable.

Making the best of a bad deal

'Compatibility' is a favoured retort of publishers and developers alike when the stability of their code is called into question. You can't help but feel cynical, Granted, there are many pieces of hardware that people can own, from 3D cards to processors. But surely it is the responsibility of the publisher to check such issues if they intend to market their

title to an entire market. Naturally, if a PC owner has a woefully obscure or dated device, it would be wrong to expect native support within each and every game. But is it too outlandish or unfeasible a concept for publishers to supply their QA departments with a large range of representative PC hardware?

Braveheart, a recent release (see E74), is a classic example of inadequate hardware testing. After installation, it is suggested that first-time players read a provided text file. Among other concerns (it has crash bugs), it suggests that owners of DVD-ROM drives may encounter difficulties. Its proffered solution? 'Disable the

game port on your sound card. Edge duly performed this task, yet still encountered drive-related annoyances. Even with music turned 'off', Braveheart continues to spin its CD at an alarming pace. When removed from the drive after a modest duration of play, it is hot (rather than warm) to touch. Worse, doing so with the game still running — a reasonable demand to make from a game with an install of over 400Mb — renders it almost unplayable, with intermittent pauses 'locking' you out.

A patch is, undoubtedly, in the works. Appeal's Outcast is another title that, by its own admission, may not work comfortably with certain hardware. In a special chart written to help owners alleviate problems, Appeal details potential fixes for various flaws. Some require the disconnecting or disabling of devices. Outcast is, without question, a fantastic title, and one of the most enjoyable PC games in recent years. But actually getting the game to run, even with its two patches (combined size: 10Mb) can be a trial. This lessens the impact of an otherwise excellent title.

Stop, look and listen

Gameplay fixes are a welcome, yet peculiar breed. Often included with code-repairing patches at the behest of the public, they vary from the basic to the heavy duty. For TOCA 2, Codemasters addressed a number of minor bugs in a modest downloadable file. Included in the list of enhancements and repairs lies a particular gem. On the Brands Hatch course, at the bottom of Paddock Hill (you approach it from the start line), there is an awkward stretch of bumpy track. Unless your racing line is perfect, or you slow down in advance, this leads to frequent spins - especially with a digital control method. Noting feedback, Codemasters

Sometimes a patch offers an

integral feature. Rebellion's save-game patch for Aliens Vs Predator

came after a huge amount of consumer feedback



According to its programmer, Battlecruiser 3000AD was released for the Xmas rush, in a highly unfinished state. Its first boxed version was 'unplayable'



Oliver Collyer
Sports Interactive

Co-founder of Sports Interactive, and a founding father of the Championship Manager dynasty, Collyer is a fierce advocate of supporting, and addressing, the requests and suggestions of his games' many fans. For him, the after-release patch is a way to sustain the interest of players

Edge: Did you have to debate with Eidos about your free monthly updates? After all, some might think this could damage potential sales of the seasonal updates.

oc: To be honest, we just did it. I don't think it does harm the sales of new season update discs, though. We think that it actually complements them. People can buy the original game and keep on updating it, and it keeps interest alive. We believe it makes people more inclined to go out and buy a new version. I think the worst thing you can do is to just release a game and then leave it; to not even communicate with the people that are playing it. Obviously, you hear of compatibility problems and a few bugs, but people also make suggestions on how to improve the game. Sometimes you just don't discover play issues until a quarter of a million people have played it. You have to listen to what people are saying and to improve things where you can.

With a football game, the database is almost always out of date. We want someone who buys CM3 to be able to go to a Website, or a magazine coverdisc, to download the most

current information. And that's largely because if we were buying and playing it, we'd want the same opportunity Edge: Do you think that publishers appreciate the 'community' issue? OC: No, I don't think they do. Id keeps a good presence on the Internet, and Alpha Centauri has a fair amount of support, too. And it's really important to do that. There's a lot more to it than simply setting up a few Websites and letting people get on with it. For example, I think it would be cool in the future to make the database updates automatic. When people start a new game, they could be given the option to download all the new player data. Edge: A number of publishers are at present considering macropayment systems, where they could charge for gameplay-related updates via the Net. Is this something you would consider? OC: That's a tricky one. It's hard to say what people would pay for without any good examples to look at. But I do know that it's something that we wouldn't want to do. I mean, we'll do new season updates Ivia traditional retail channels), where we substantially update everything. That's

16 leagues, all the competition rules. it's a big, big task, and it takes a lot of time. And then adding many other enhancements – I think we're justified in charging for that. But if you're just tweaking bits here and there, and adding a couple of extra bits, well, that's something you should do for free really.

Edge: You seem to have a similar philosophy to the developers at Valve. When you look at how *Team Fortress* has complemented the success of *Half-Life*, it's hard not to admire their attitude to their audience.

OC: It was a really good thing for them to do – they could have charged for that, and possibly got away with it. But they chose not to. That will stand them in good stead for their next game because people will be so pleased with what they got. You spend your money on Half-Life and then you get Team Fortress, too, you're going to think you've got a really good deal. It's a long-term view. The problem is that too many publishers just look to their next financial quarter, and can't see any further than that.



Outcast: great game, unstable code. Is it any wonder that its bugged review beta was maligned?

made this stretch of track slightly easier to negotiate.

Sometimes, what appears to be a tiny tweak can make all the difference. A former Zzap! 64 staffer once told Edge that after a visit to Sensible Software to view the first Amiga version of the classic Soccer, he was less than impressed. At around two or three weeks prior to its publishing deadline, he felt it was nothing special. In the intervening time, Sensible tweaked its code in small, vet significant, ways. The rest, as it's said, is history. Games are, admittedly, far larger these days, but seemingly tiny enhancements can still change the way a game plays. EA's FIFA Road To World Cup '98 enjoyed a favourable critical reception, but few saw fit to mention its CPU teams' affinity for shooting from ridiculously long range. Buyers, however, did, and EA released a patch that reduced its AI code's affinity for Beckham-style chancing. The result? A far more enjoyable solo game. Sometimes, a patch can offer an entirely more integral feature. Rebellion's release

of a save-game patch for Aliens Vs. Predator came after a huge amount of consumer feedback. Although they evidently did not want to include the option, a compromise of three saves per level appeases players, while remaining, in part, true to its original vision.

In praise of patches?

Is a patch that offers a solution to gameplay issues a praiseworthy thing? The answer must be yes. Subjectively, it's easy to point out the flaw in the original build, and suggest that better playtesting may have led to its repair prior to release. And, while the topic of wildly beneficial mods and patches is explored elsewhere in this article, play-related fixes can be hugely beneficial, no

matter the standard of the prerelease QA. The entire patch debate is a doubleedged sword.

Take Anna Kournikova's Smash
Court Tennis, for example. Considered
by many devotees as one of the
PlayStation's finest multiplayer games, it
has two infuriating problems. The first is
that player one always begins a match
with a serve from the bottom of the
screen. Worse, though, is the oversight
that leads to a similar state of affairs
during tie-breaks. As everyone to have
played a Smash Court game will recall,
this is a sizeable handicap for player two.
Were it a PC title, a patch to remedy this
oversight would be par for the course.

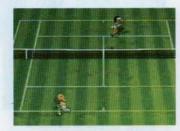
It's not the actual bug fixes or gameplay patches that rile PC owners, it's the perceived complacency of the companies that appear to rely on them. When the first 3D accelerator cards were released, many companies — understandably — rushed to release add-ons that provided support for a variable number of boards. Was it at this point that patches started to become the rule, rather than the exception? Looking back, it certainly seems that way.

Bug-riddled games are, more often than not, lambasted by PC magazines. The over-reliance on patches, too, is a popular subject for editorials. However – and this is a significant point – such criticism tends to be levelled between one and three months after their original review. Part of the problem is that PC magazines are often obliged to review a beta version of a game. They could wait for a final version, but a packaged, published game will rarely be a much-coveted 'exclusive'. It's the lesser of two

It's not the actual bug fixes or

gameplay patches that rile PC owners, it's the perceived complacency

of the companies that appear to rely on them





Smash Court Tennis 2 (left) is a console game that begs a simple gameplay 'fix'. Champ Manager 3 (right) benefited from after-release support



Peter Cardwell
Codemasters

Codemasters has acquired an enviable reputation as a producer of top-quality software. A lesser-known, but impressive aspect of that success, is the stability and polish of its PC releases. Edge spoke to QA manager Cardwell to find out more

Edge: How do you address the problem of compatibility at Codemasters?

PC: We have a compatibility manager, and his sole job is to look at PC-related problems. He works to a set of guidelines and has five people working with him. They've got good working relations with a number of hardware manufacturers, and they check all new devices. He runs installation tests, with a variety of configurations, with other software packages that people might have. the systems files and registry, all that kind of stuff. We've also got a number of machines sourced from other countries for localisation tests. They are left in their original state as much as is possible

Edge: Codemasters, by PC

game publisher standards, has a remarkable track record with QA standards.

PC: I think it relates to the fact that Codemasters is a pic. We don't have to release games for the run up to the end of the year or anything like that. We will hold back a game if we feel it's not right.

Edge: How important is afterdevelopment support? For instance, Edge heard that you received a number of calls on the subject of Paddock Hill in the Brands Hatch course.

PC: We get customers phoning in or using the Website, and they say, "On, my car always does that, at that particular bend." Now, it might be that the game physics are okay, and that people just aren't slowing down to the correct speed. I monitor these messages, and get a report from the helpdesk manager Robert Meeks every week. He gives me a lot of feedback about what people are saying about particular games. And if there's something we can change, we'll incorporate that into a patch.

Edge: In your opinion, should there be a disparity in the standards and stability of console and PC releases?

PC: [Laughs] Good question. And very difficult to answer. [Pauses] Yes, I think that things do, unfortunately, work that way – simply because of the variety of hardware that exists out there. But, at the same time, I don't think that's an excuse for software houses to sit back on their laurels and treat the PC any differently.

very different evils, in their eyes, to accept the gold burn, with its accompanying bug sheet.

Most beta versions of games are, granted, perfectly stable, and are so near to the final code that the two would be indistinguishable to all but their publisher. Sometimes, though, a

title can be riddled with crash bugs and glitches. 'Oh, that will be fixed in the final version', is the standard response to the most carefully worded enquiries about a particular issue. PC mags are perfectly aware that bugs slip through the net. But they can't, in general, say which ones for will pay extra to get that bit more. The sales of add-on packs and 'special editions', too, allude to greater money-making potential than many would expect. After all, if you were to remove the cut of the retailer and distributor, then distribute the code waither the code.

time, it eclipsed Unreal and began to encroach upon Quake II's dominance of online gaming. The release of Team Fortress Classic, however, has made it an enormous success. TFC was not an innovative release – it was, after all, a rewrite of a Quake mod.

Countless variants of the Capture the Flag theme exist elsewhere, and teamplay has been a favourite since Quake. What it did, though, is to provide a collection of solid maps that everyone would own, with clear rules and — a stroke of genius — different player classes, cementing its credentials as a team game. As a co-op experience, Team Fortress Classic has no real peers at present. And its success, naturally, reflects that.

A humber of developersand

publishers are considering the possibilities of charging for what, at present, are free downloads





TOCA 2 (above) demonstrates the consumer-pleasing potential of making simple game fixes. Sierra's Grand Prix Legends (top) also impressed gamers after several enhancements were made available post-release

sure. So they don't, until well after the event.

If it ain't broke, fix it

Patches that act as bug fixes or offer minor gameplay tweaks are now a mainstay of PC garning. For some developers, though, the process of refining and genuinely improving a game goes on well past its original commercial release. Keen to appease a fan base, and perhaps aware of the subtle marketing potential of such apparent altruism, they release new cars and tracks, units and maps, and so forth. From additional multiplayer levels to entire singleplayer experiences, this game-enhancing code is distributed via Internet and magazine coverdiscs. The player, naturally, is invariably delighted: these extras are genuinely free.

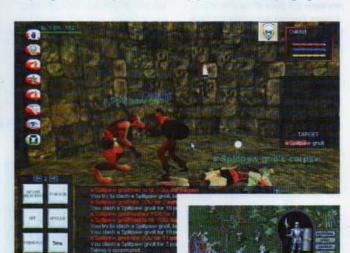
But for how long?

There are doubtlessly more burning issues within the industry at present. Nonetheless, a number of developers and publishers alike are considering the possibilities of charging for what, at present, are free downloads. Aware of the subscriber-based success of *Ultima Online, Meridian 59* and *EverQuest*, it's fast becoming apparent that consumers

The one drawback, from an industry perspective, is that charging for add-ons of a small-to-average size might prove counter-productive. Take the recent example of Half-Life. Lauded as an exemplary piece of singleplayer gaming, its multiplayer aspect was almost equally compelling. Within a short period of

Community service

Had Valve charged for the *TFC* download, would it be even nearly as popular? It's doubtful. By forgoing the



Games that auto patch will no doubt become more common with the advent of ADSL. It works, as Ultima Online and EverQuest show



Andy Robson

Erstwhile Bullfrog QA supremo Robson now plies his trade at Lionhead, where he finds working for an independent company leads to fewer compromises. The programmers are as slippery as ever, though, he claims Edge: It's hard to put this delicately, but you have a bit of a reputation in the Lionhead offices...

AR: ILaughs) Yeah, "Gestapo Robbo" they call me. I have a love-hate relationship with people here. The only way to get things fixed is to keep on people's backs. But there's nothing worse than making people hate you, because then they won't fix things when you ask. You have to be careful with how you treat people. Again, it's important to have a laugh. I do things like "Worst Programmer of the Week", where everyone can see who has the worst bugs. And people fix things without me having to say anything.

Edge: Do you need huge strength of character to do your job?

AR: Definitely. You have to have good

ommunication skills, without a doubt. Programmers are just the worst, they fob you off with so many stories – "It's Windows," or "It's his bug not mine," and so you get this vicious circle of trying to track down the person responsible. And it's always the person who told you that it wasn't theirs. Edge: A lot of publishers cite 'compatibility' as the standard excuse for bugged PC games. What's your opinion on that? AR: What it boils down to is publishers

wanting to get products out within the quarters. It's all, "We want this game out now -if it's three months late, how many sales are we going to lose?" So they put the game out, saying: "Oh, we'll do a patch." Sometimes, the patch is being written while they're actually manufacturing the CD. So by the time the game comes out, the patch arrives at the same time.

When I worked for Bullfrog – for four-and-a-half years – I did a lot of titles. And we got sick of doing patches. You've been working on a game for two-and-a-half years, and then you've got to do a patch for it – well, why not just wait until it's all done? People get their hands tied behind their back by publishers. The difference here at Lionhead is that a game will not go out until it has got past me.

Edge: Do you think that publishers should re-evaluate the way their

playtesting departments work? Couldn't it be argued that someone checking for bugs will be 'testing to destruction', rather than playing it like a gamer might? AR: That's another thing that we do here. We have a constant flow of about four or five people in every week They're from all around the world, and they're fresh eyes for me every week I've been doing this for years, and simple things might pass me by -1 might not, for example, find it hard to scroll around the man But someone else might come in and say, "Look, this is awkward, it annovs me." And we find these things out, because the people playing it are the people that will buy it.

Getting the interface right is just as important, too. We've started the help system now. So, think: by the time the game comes out, we'll have had around 1,000 people play it. And they will have said, "Ch, I didn't know how to do that." Well, we've put all that in so that similar people will know how to do it. That's how perfect we want Black and White to be.

right to charge for its work, Valve has arguably garnered a greater degree of profit. First, it has whetted appetites for the forthcoming *Teom Fortress 2*. Second, its reputation as a developer has risen inestimably in the eyes of players. And last, but not least, *Half-Life*'s online presence – in terms of fan pages, clans and the like – has grown further. There are countless other fringe benefits, of course.

The same can be said of *Total Annihilation*, Cavedog's critically acclaimed debut. Not only did Ron Gilbert's team take great care to make the title expandable by users, but they also contributed to the process themselves. With new units and maps released on an almost weekly basis for a time, the replay value of *TA* was boosted several times over for dedicated fans.

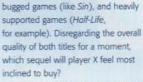
Championship Manager 3, too, benefits from the not entirely commercially oriented sensibilities of the Collver brothers. The first Championship Manager was programmed in BASIC for the Amiga, for the sole reason that no one had created the football management game that they wished to play - so they made it themselves. Domark swooped to publish it, and it now represents arguably the second most significant franchise in the Eidos portfolio. It's refreshing, then, to note that the CM3 team make monthly updates - with player-requested fixes, minor alterations and database updates - that can be downloaded from the Web. Part of the success of the CM series is its seasonal updates, which often retail at around the £20 mark. By

effectively offering most of its content for free, it could be argued that they are damaging sales of these upgrades. But what of the genuine sense of community that their generosity helps foster? Can a value be applied to that?

A stitch in time...

It is unreasonable to expect that the PC market could ever become a bug-free utopia. Many observers, for example, cite the pressures of being listed on the stock exchange as ample reason for the early release of inadequately tested games. The larger companies, it is argued, have a duty to shareholders or investors. If they promise to release a number of games within a financial quarter, failure to deliver the goods could lead to commercial consequences.

But that argument, perversely, appears to Better still, servicing the needs and wants of a user base enhances the reputation of a developer. With the industry's (perhaps predictable) fascination with the franchise, surely this is a direction that every publisher should consider? Even Core, despite the runaway success of the Tomb Raider series, has seen fit to offer extra levels



PC games: they do exactly what they say on the readme.txt in V1.04.
Or was that V1.07...?





Total Annihilation (left) gained a huge amount of Internet support thanks to its many add-ons. Will Kingdoms (right) see this strategy resurrected?

With Driew units and maps

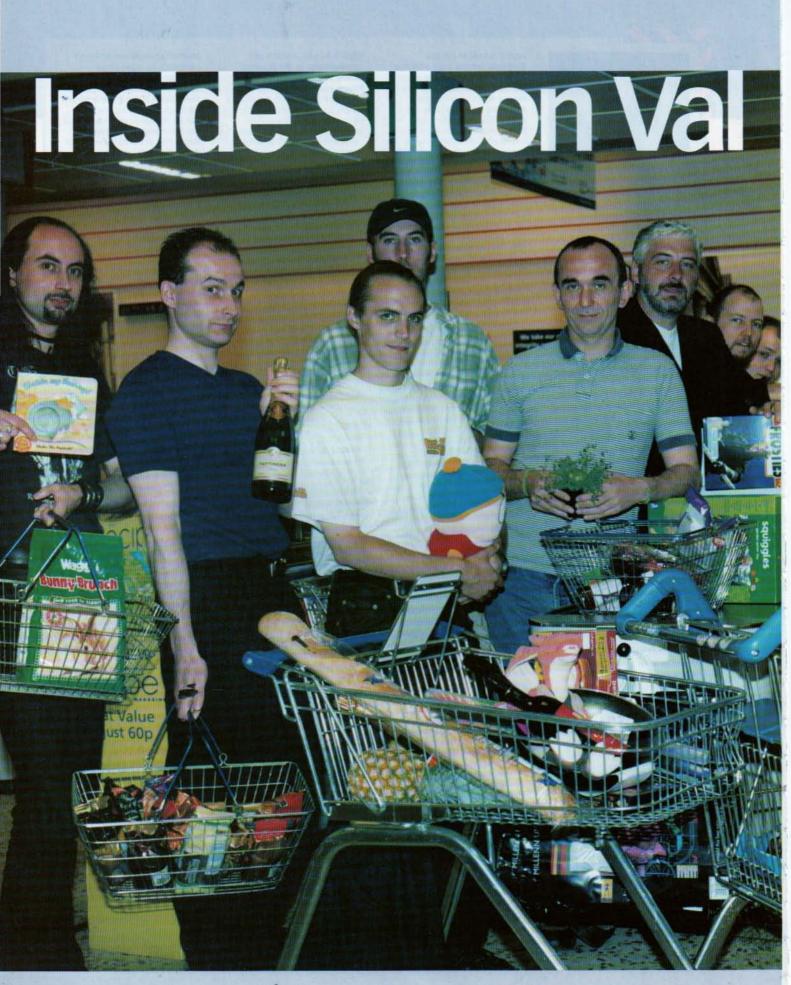
Deleased or Carcal most weekly basis for a time, the replay value of Total

Annihilation was boosted several times over

disregard the fact that said companies also publish console games. Granted, developing a PC game introduces a variety of compatibility issues. But, taking the example of Codemasters, a reasonably small team of dedicated, tech-savvy specialists can solve this problem. Better QA comes at a cost—but isn't its ultimate worth higher?

A crash bug can kill interest stone dead in an instant. But a modification, extra track, or suchlike, can prolong it. for the first two episodes as free downloads – a simple, yet effective way of maintaining fan interest.

Patches, their usage, and their potential, remain a contentious point. Publishers dislike using them as bug fixes after a rushed release, but do so regardless; wise developers use them to service and please, to foster a community, but are exasperated at their publishers' ignorance of how important this can be. Meanwhile, the player buys





hey're everywhere and all around us. We meet them in the supermarkets and in the newsagents. We notice them on adjoining tables at lunchtime restaurants and we spot them in their cars. We recognise one travelling by bus.

The venerable town of Guildford looks innocuous enough, but **Edge** senses a shifting presence among the shop assistants and white-collar workers. A silent subspecies has risen up among their ranks, like the pockets of unnatural GM crops in the fields that buttress the town.

They look the same — only they're paler — and they walk the same — only with a little less purpose. Their eating habits are erratic and they are often only recognised when they're out in force.

For those in the know, their ten-year presence has transformed the name of this staid commuter town.

"They are corrupting the youth," Guildford's good burghers might cry. "Their diet is poor and they've seen 'Star Wars' five times," Guildford's worried mothers might lament. If they knew they were here at all.

They are the spawn of Bullfrog and their number is legion.

"You've got to remember that the thing I'm most proud of isn't the games at all – it's the teams who made them," says **Peter Molyneux**, the first father of the first Guildford studio, Bullfrog. "When you're actually going to work every single day, these are the friends that count. These are the people with respect for you – they're the ones who really judge you."

Come to Guildford for the first time and you're in an unremarkable commuter town about 30 minutes south of London. But **Edge** has visited again and again, and has witnessed the community within the community here.

You see, Guildford is stuffed with game developers. Nowhere else in the UK will you find 300 game developers working in such close proximity. But it's the explosion of companies here, rather than employees, that really makes Guildford an unlikely answer to San Francisco's Bay area, or the firstperson party people of Dallas, or Nintendo's Kyoto stronghold.

Guildford didn't ask for them, nor have they sprung unbidden from the water. They're largely here because of the biggest frog in the pond, Bullfrog, the legendary game studio that Molyneux and Les Edgar founded in 1987.

Since Molyneux and Edgar sold out to Electronic Arts in 1995, nearly all of the Bullfrog originals have hopped off to start their own companies – including their former bosses. Molyneux founded Lionhead after finishing off Dungeon Keeper in his house, and a dutch of his senior generals promptly jumped ship to found Mucky Foot. Since then, ex-Bullfrog staff have founded Big Blue Box, Lost Toys, and at least one more development house (about which **Edge** is sworn to secrecy). Most recently, even Les Edgar – who remained at Bullfrog as managing director – has departed to seek pastures new.

There are also 'unrelated' game developers in Guildford. Simis, best known for its PC flight sims, and Creative Assembly, working on the promising Shogun: Art of War, are just a stone's throw too far to be true Guildford sons. But Criterion Studios is slap bang in the middle of town and, with its sister wing Criterion Software, houses the most developers in the area outside of Bullfrog.

Guessing the worth of these companies is





difficult, but irresistible. Most will estimate their value off record, and, aided by some senior members of the Guildford aristocracy, **Edge** hazards a total value of some ESOO million.

In the latest twist — as if upstaging the exodus following Molyneux's departure — Bullfrog and EA Studios (it's harder than ever to tell the two apart) is leaving Guildford early next year. It might only be going ten miles up the road to Chertsey, but with an initial capacity topping 600 people (including EAs marketing and sales staff), the behemoth could finally live up to its legend. Like a Death Star poised just beyond the plucky Guildford startups, the Chertsey campus threatens to blast creativity into smithereens with a deadly stream of sports franchisms.

Or so the startups would have you believe. In fact, Bullfrog has been through some internal changes of its own, and the result could simply be another game in the lineage of Populous, Theme Park and Dungeon Keeper.

But what about the town it's leaving behind?

Does Guildford merit this attention?

Step back in time

Like nearly everywhere in England, Guildford has quite a history. Created by the Saxons in 600AD, it was soon

Fresh produce: Big Blue Box



Founded: July 1998

Location: Peter Molyneux's house, Surrey

Staff: Four

Ex-Bullfrogers: Four (100 per cent)

Guildford natives: None

Previous games: None

Upcoming: Wishworld (top secret)

Biography: Big Blue Bro's Dene and Simon Carrer and artist an Lovett all finished *Dungeon Keeper* for Builfrog in an annex of Peter Molyneus's house before founding the studio it's the first Lionhead Satellite developer.

Favourite pub: The Cricketers

Best thing about Guildford: "You can get out of it and into the countryside within ten minutes," says Matt Dixon. Worst thing about Guildford: "It's the wealthiest county in Britain and it feels it," objects Simon Carter.

Best kept secret: It would have been the créperie in Guildford, with good-looking waitresses and excellent tuna and mushroom crépes. But not enough people agreed and it's now deceased. minting its own coins and welcoming members of the royal family, although the massacre of 200 of the king's men in 1036 may have dampened its popularity. Luckily for Guildford, England changed hands following the Norman invasion in 1066. The first thing the conquerors did was to build castles to protect themselves against the disgruntled populace. The remains of Guildford's fortress has watched over 800 years of trading, with first wool, then a big regional market, and now various office-based industries — including computer games — swelling Guildford's coffers.

Modern culture hasn't been overly kind to the town. Peter Molyneux jokes that the number of theme bars has risen in step with each new batch of developers. The infamous bomb marks out the ugly end of Guildford's recent past. The Guildford Stranglers used to practice downstairs from one of the Lost Toys, but they dropped the "Guildford" when they found fame. One-hit wonders The Vapours penned "Turning Japanese" here before disappearing into the ether. And Guildford's squat cathedral, which watches over the road to Lionhead, took centre stage in "The Omen" — which didn't stop the Pope visiting later to give the town his blessing.

The population of 130,000 includes more MPs than anywhere else in the country and enjoys the highest divorce rate, too. "Guildford is full of people wearing peak caps, chequered shirts and driving fast cars," says Big Blue Box's **Dene Carter**. "They're like a posh breed of wide-boy."

The fact that Guildford's citizens know nothing about the great games that have been produced in its environs isn't even unusual – Guildford thrives on invisible industries like insurance and pensions, and faceless organisations shunting toothpaste about the globe.

Just as it's impossible to see the revolution in the concrete sprawl of Silicon Velley, so there's no din in the industry of games creation. Just the hum of hard disc fans,

Growing pains

"Guildford is a little bit boring," reveals Molyneux with a whisper. "It's just boring enough to make it more fun to stay in and work."

Molyneux is sitting in an office in the Surrey Research Park building that houses Lionhead. The park is a familiar stomping ground. Bulltrog lived here during several of its pre-EA growth spurts, and Molyneux vaguely indicates where they were based for particular games with a 'that building there' — pointing like a Yorkshireman who expects you to know one green dale from another. The buildings in Bulltrog's Syndicate Wars were apparently inspired by these squat brown blocks. Even Lionhead's interior-designed office sorely misses the fish-tank floor holding sharks that Molyneux once told Edge he'd hoped for.

Is Guildford's blandness ironically its lifeblood? Perhaps, but there was no grand design. The Guildford development community is an accident. "You can't even say Bullfrog was founded here – it just sort of happened," Molyneux smiles.



Mucky Foot's Fin McGechie (left) and Dene Carter (right) get all fruity

Andy Cakebread of Bullfrog considers getting the drinks in



Fresh produce: Honhead

Founded: July 1997

Location: Surrey Research Park, Guildford

Staff: 17

Ex-Bullfrogers: Six (35 per cent)

Guildford natives: None

Previous games: None
Upcoming: Black and White

Biography: The talent-stuffed studio that Peter Molyneux set up after quitting Electronic Arts. Black and White will

be published by EA.

Favourite pub: Scruffy Murphy's

Best thing about Guildford: "It's close to London without

the distractions," says Peter Molyneux

Worst thing about Guildford: "It's got too many shoe shops. It's got 26 shoe shops and I only buy one pair of shoes every year. There isn't hearly enough gadgety

shops, or even art shops."

Best kept secret: Guildford has the biggest sports centre in Europe, according to Lionhead's

PR agent Cathy Campos



"We once had a serious vote on investigating a move to the States.

We thought, we could be sitting on some Caribbean beach, so why are

we here in Guildford with the shit weather?" Peter Molyneux, Lionhead

Builfrog was formed out of another company called Taurus Ltd, a business software house that Edgar and Molyneux had set up in an office above a computer and hi-fi store that Edgar already owned.

"It was the most disgusting place," Molyneux recalls, winkling his nose. "We were in the attic, and there was an old woman living downstairs who had every kind of old-age disease. There was only one toilet between us all and it didn't have a lock on it. Urgh! It's a scarred memory. We used to piss in the sink upstairs, I'll admit it now."

Bullfrog squeezed ten people into that 15-foot-square room, artexing the walls to hide the filth. *Populaus* and *Powermonger* were both made there, multiplying prodigious creative talent and cheap tents into games worth millions – although it took some time for the money to filter through.

Bullfrog had long spent its £20,000 advance from £A for Populous and was working on its next game when a £13,000 cheque dropped through the letterbox.

"I actually phoned them up to make sure it was ours," laughs Les Edgar, whose shop had already done very well selling BBC Micros to Guildford's middle classes. "EA said, "Look, you've paid your advance back, these are your royalties". So we split it and I bought a kitchen. I think the next cheque was for quarter of a million."

By 1991, cash-rich Bullfrog had abandoned Guildford town centre for the Surrey Business Park.

"Mark Webley had joined to take control of conversions, and we took on a lot more people, so we moved on after about 18 months," says Molyneux. "We moved to that building over there, where we did Syndicate, Magic Carpet and Theme Park, then we moved to another building. Each one was incrementally bigger, and each time we thought we wouldn't ever need more space.

"That building is the one that Bullfrog was sold to EA in," adds Molyneux, pointing. It looks exactly like all the others.

Returning to roots

"Didn't you ever think of setting up Bullfrog somewhere else?" your correspondent asks, whose enthusiasm for the locale is, waning by the second.

"Oh, yes," admits Molyneux: "We once had a serious vote on investigating a move to the States. We thought, we could be sitting on some Caribbean beach, so why are we here in Guildford with the shit weather?"

But, luckily for the area's estate agents, Bullfrog never had time to make the move. Besides, key staff members were putting down the roots that would one day see most Bullfrog spin-offs equally reticent to leave.

Famously, Molyneus's belief that he could mould himself the role he wanted following the sale of Bullifog to EA proved ill judged. Frustrated with bureaucracy and paperwork, he was soon holed up at home with the *Dungeon Keeper* team, slaving on what would be his last Bullifog game.

Today, in the same office, sits the first Lionhead Satellite developer, Big Blue Box, enduring what must be becoming something of a Groundhog Day. Founders Dene and Simon Carter and Ian Lovett all worked here on *Dungeon Keeper* with Molyneux. His office-shuffling routine is repeated, but with the

Fresh produce: Lost Toys

Founded: March 1999

Location: Upper High Street, Guildford

Staff: Five

Ex-Bullfrogers: Five (100 per cent)

Guildford natives: Three

Previous games: None

Upcoming: One project due Christmas 2000.

Biography: The most recent break-off, and currently in its "pure" Builfrog phase. Founders include artist Darran Thomas and programmers Jeromy Longley and Glenn Corpes. Backed by Les Edgar, Lost Toys is courting publishers.

Favourite pub: The Jolly Farmer

Best thing about Guildford: The Royal Oak, which serves 17 different types of sausage where varying number of Builfrog staff – including all the Lost Toys – have dined every Friday for three years.

Worst thing about Guildford: "it's full of snobs," says Darran Thomas.

Best kept secret: "Who's going to be next" - Jeremy Longley.



desks. Edge can't be sure, but it seems there has been some reshuffling

Molyneux's expansive house is a Guildford legend. Tucked away behind huge dog-guarded gates, its gables and country garden give it the air of the pleasant lands in Dungeon Keeper just before the evil player gets to work on them. Inside, it's a gamer's delight.

Innocuous bookcases lead to secret rooms. while pausing to admire a statue can cause a wall to slide back revealing a swimming pool. Specially created wooden gaming tables host esoteric sessions among favoured members of Guildford's disparate tribes. One room has hundreds of boxed board games lined across the wall. And, needless to say, Molyneux's audio-visual setup puts even that of Edge's illustrious games room to shame.

It seems every ex-Bullfrog developer has a fond memory of the place. "All of Peter's parties have been great," says Lost Toys' Glenn Corpes. "His last birthday party had the best fireworks I've ever seen."

Sadly, others have less heart-warming memories. A developer known as 'Mad Phil' apparently 'kicked in' Molyneux's landing, according to one source, shortly after a very high-profile developer urinated over it. Glenn Corpes and Mucky Foot's Mike Diskett are apparently always locked in a standup fight by 3am.

Meet market

The rest of Guildford's development real estate is less impressive, Criterion Studios' canal-side abode is pleasant, but hardly sensational. Lost Toys' currently tiny team is huddled into the comer of a vast space in a very ordinary office block. Mucky Foot operates out of a fire hazard in what Gary Carr bluntly describes as "the armpit of EA."

Electronic Arts/Bullfrog might be just around the corner, but Mucky Foot doesn't have much to do with them these days. Along with Lionhead, it's the oldest spin-off and it houses some of the earliest Bullfrog renegades. The team have few friends at Bullfrog now

Instead, these break-offs seem to have created almost a Bullfrog without Bullfrog. Spread across the town are bands of friends who worked together

Fresh produce: Bullfrog/EA Studios



Founded: 1988; EA-owned in 1995 Location: Guildford Business Park

Staff: 160

Ex-Bullfrogers: "There are still a few staff with single-digit employee numbers," says EA spokesman David Wilson. Guildford natives: A few, but unknown

Previous games: Fusion, Populous, Powermonger, Powermonger WW1, Flood, Populous II: Trials of the Olympian Gods, Populous II: The Challenge Games, Syndicate, Theme Park, Magic Carpet, Hi Octane, Magic Carpet II, Syndicate Wars, Theme Hospital, Dungeon Keeper, Dungeon Keeper: Deeper Dungeons, Populous: The Beginning, Dungeon Keeper 2.

Upcoming: Theme Park World, EA football sim Stars. Favourite pub: Café Ha-ha

Best thing about Guildford: "The bunny rabbits, they're everywhere in this town" - Alex Peters, producer, DK2. Worst thing about Guildford: "I don't live here because I can't afford to" - Kelvin Tuite, lead artist, Stars.

Best kept secret: Original titles are in production.

Jamie MacDonald (Criterion), David Amor (Bullfrog) and Darran Thomas (Lost Toys)



for years, drank together, teased Peter Molyneux, and talked about good games and bad ones. The only thing that has changed is that they all work for

The place where most of them catch up, oddly enough, is the supermarket. "The single biggest blow you could make to the games industry in this country would be to throw a grenade into Tesco at lunchtime," says Big Blue Box's Simon Carter.

There's also a football league. Sides from Lost Toys, LionFoot (fielding members of both Lionhead and Mucky Foot), Bullfrog, Criterion and EA Studios, all lock battle on the pitch, with Criterion struggling and LionFoot headed for glory.

Another common bond is the 'GGD', the Guildford Game Developer email list, created by exiles from Bullfrog who pined for its equivalent.

"The GGD mail list generates more traffic than the M25," says Dene Carter. "Some days you get so many posts you have to turn the mail program off."

"There's a huge rush of interest as soon as anyone puts anything out," says Simon Carter. His brother Dene adds: "We all fondly remember the days when we worked together." Simon retorts: "Although I'm still not quite sure how 200 of us can have fond memories of when we were just 20 strong...

"We all pretty much help each other out," agrees Mucky Foot's Gary Carr. "We cross-reference potential staff and CVs with Lionhead, and we've used their sound studios, too."

"Talent breeds more talent," opines Simon Carter. "Mucky Foot, Lionhead and the others, we all have talent and we need to bring newcomers into the industry. If it's all kept in one place then no one learns anything."

All the Bullfrog break-offs are rooting for each other. Simon has advised his old colleagues working on Dungeon Keeper 2: "There's no bad feeling among us that Dungeon Keeper 2 has done so well. There were even some concerns about the lack of publicity before launch."

"It was almost maternal concern," adds Dene Carter. "I did some voices for Dungeon Keeper 2." "Although there was an awful lot of talent there to begin with," adds his brother.

Others like to talk tougher. Mucky Foot, in particular, revels in its bad-boy image. "We tempted everyone from Bullfrog over to our Christmas party at The Whitehouse last year," says Carr. "Les Edgar came over and opened up a tab - he had to because there was no one left at his do. Everyone thought they were drinking on us, but it was all on EA."

As their mates have left the company, Mucky Foot has poached less from EA, with more recent recruits hailing from defunct Psygnosis and Perfect Entertainment studios. But a telling exchange occurs when Carr muses over the ramifications of Electronic Arts' imminent move to Chertsey.

"Once you take the whale away, there's nothing left to poach from," says Carr.



"We've not been poaching," Fin McGechie replies. "We've been freeing battery hens into the wild."

Pond life

Edge arrives at Bullfrog fearing the worst and, initially, isn't disappointed.

The taxi pulls up outside a huge glass entrance chamber. On one side it says 'Bullfrog' and on the other 'Electronic Arts'. 'TM' and 'R' signs have been added at a later date. Inside it's cool and quiet. The only toy on display is a five-foot high rubber model of *Dungeon Keeper*'s Homed Reaper, tucked somewhat apologetically under the stairs.

Edge walks over to the reception and announces its intention to meet Bruce McMillan, the managing director of EA Studios and Bullfrog, who spends alternate fortnights in Guildford and EA Canada.

"Er... who was that? McMillan?" says the receptionist, who clearly has no idea who he is. She begins to run a finger down a phone list.

Two prim and proper women are talking loudly as they click across the entrance chamber. "I'll be down in half for the facilities meeting," says one to the other. The only women like this you could imagine getting anywhere near Mucky Foot's offices would be an estate agent, handing over the keys before she bolted for her car.

With the receptionist apparently dialling random numbers in an attempt to ascertain who this McMillan character is, a single file of what **Edge** initially takes to be a party of lost school children make their way down the stairs. The rag tag band is wearing shorts, they barely talk, and they look ill. They cling to the sides as they descend. You imagine the air conditioning is trying to purify them out of existence.

They are programmers and they look oppressed. It's all too perfect...



Tuite can understand where the Bullfrog exiles are coming from – but he dismisses its relevance for people working at the studio today. "They are like rock stars going back to their roots," he says. "They got jaded, and EA was an excuse for that jadedness."

Alex Peters was, most recently, producer on Dungeon Keeper 2. He's been at Bullfrog since the

The place where most of them catch up, oddly enough, is the supermarket.

"The single biggest blow you could make to the games industry in this country would be to throw a grenade into Tesco at lunchtime" Simon Carter, Big Blue Box

Urban myth

... to be true. The receptionist announces she's just a temp – she's only been at Bullfrog for four hours, which is even less time than some of the new Guildford startups have been in existence. The EA PR manager who turns up soon sorts things out and, worse, he's on first-name terms with several of the programmers. Things get even less dark and evil when **Edge** talks to a few producers. Life at Bullfrog is clearly far from universally despised.

"As soon as I got here, I thought, this is great! What is everyone complaining about?" says **Kelvin Tuite**, the lead artist on EA Studios' upcoming football game *Stars*. He doesn't appear to have his fingers crossed.

Molyneux-merger era and says it's unfortunate that some of those who grew dissatisfied with Bullfrog couldn't wait just a little while longer. It had to get worse before it could get better, he argues. "It's not as corporate now as it was two years ago."

Edgar makes a similar point, explaining why he stayed on at Bullfrog for four years after the merger.

"I felt there was a moral obligation in a strange way. I knew that when we joined EA the shit was going to hit the fan, and I felt I should be there to see it through," he says.

"Everyone thought it would take a year and a half, but it took three years to just start to get it back," he continues. "We went from 40 people to 140 in that



Breaking the bread: Big Blue Box's Simon Carter duels with a foil from his past

Fresh produce: Criterion Studios/Software

Founded: November 1993

Location: Guildford town centre

Staff: 65

Ex-Bullfrogers: One (1.5 per cent)

Guildford natives: Two

Previous games: Scorched Planet, Sub Culture,

Redline Racei

Upcoming: Trick Style, Deep Fighter and a Yu Suzuki title. Biography: Criterion Software (and its 20-strong technology sibling that makes the Renderware engine) is the second biggest force in Guildford development. Works with a variety of publishers.

Favourite pub: The Sun, which is 'heaving with good-looking young students' according to one Criterion source.

Best thing about Guildford: The pubs.

Worst thing about Guildford: "It's not dangerous enough, it's the soft underbelly of England," laments head of studios Jamie MacDonald.

Best kept secret: The nubile students





period. What happened was really amazing. People say it's not the same Bullfrog now and they're right, it's different. It eventually reached the point where I thought it was too different for me, too."

There isn't the scope to find out exactly what happened to cause all those developers to leave and, as everyone seems happy enough today, there seems creativity is freed up," says **Jon Miles**, lead artist on *Dungeon Keeper 2*, who is working with Peters on the prototypes. "Everyone here has sat in some grimy office pleading for the money for a new machine. At EA we're protected from that and, once you realise everyone is here to help you, it's very liberal."

Culture clash

There are big corporate developers with tight schedules and 'products of quality' and there are smaller developers with 'really cool games' and whether the twain shall meet in Bullfrog's skunk works remains to be seen. But one thing is for sure — the EA boys are going to get the better architecture when they move to Chertsey next January, even if they will have to share it with the suits.

Designed by Sir Norman Foster, the two-phase site has an initial capacity for some 600 people. It's huge, with a floodlit five-a-side football pitch, cinema, media centre and double-height street running alongside a lake. 'Soft zones', with sofas and showers, have been built into the plans, anticipating the erratic working habits of developers. Early concept art indicates the scale with an F1 car dangling from a bridge. And like at Universal Studios, there's even an EA merchandise shop.

The Chertsey campus is part of an ongoing move by EA to integrate its marketing and development operations, to get them working more closely together. The giant campuses are already up and running in San Mateo and Vancouver, and there's talk of a similar site in Germany.

The obvious question is whether the name Bullfrog will still mean anything.
"I am determined to preserve the Bullfrog culture," says MD Bruce McMillan. "The first time I came here it felt like a magical place to be. We do have that in our sports teams, but people don't see that creativity like they see it in Bullfrog. I'm glad that

"Talent breeds more talent. Mucky Foot, Lionhead and the others, we all have talent and we need to bring newcomers into the industry. If it's all kept in one place then no one learns anything" Simon Carter, Big Blue Box

little point. Bullfrog insiders admit it's unfortunate that the first two games were sequels. "People are asking why we are only doing branded products now, but if you look at *Populous 3*, it isn't really *Populous* at all. It's a brand new game," says Peters.

The studio recently set up a new prototyping department, with a brief to explore game ideas without the overheads of a full team. It's almost like having your own startup on the payroll – except they don't have to commit too soon to convince a publisher to fund them.

"The idea is to work through to the stage where we can say, 'Here is a game idea and here's the proof," explains Peters. Five new game ideas are currently being worked on at the studio.

"We've learnt from our mistakes," he adds. "We don't want to can games and piss people off — with the prototype you can try anything and not have to justify it."

"When you work in an environment like this, your

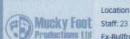
the best of both cultures are working together, but I have a Bullfrog card and I have an EA Studios card and I'm proud of both."

One ex-Bullfrog developer suggested to **Edge** that contingency plans had been drawn up to allow the studio to function at 75 per cent capacity, such is the potential for defection. Even McMillan admits that some staff won't make the move.

"Any time you have to drive somewhere new to work it's an issue," he says.
"I like this place as much as anyone else, but the air conditioning actually works in Chertsey."

"I always ask people that have left the studio, 'Did you go to a better place?," he adds. "Because they continue to talk about the studio. They say, 'Oh, I hated

Fresh produce: Mucky Foot



Founded: February 1997 Location: Woodbridge Meadows

Ex-Builfrogers: Ten (43 per cent)

Guildford natives: Three

Previous games: None

Upcoming: Urban Chaos, Space Station

Biography: The second of the Bullfrog break-offs and the closest to producing a game. Signed to a five-product deal with Eidos.

Favourite pub: The Star

Best thing about Guildford: The comic shop. "it's just a big black shed and all the comics crinkle up in the summer," reveals Guy Simmons.

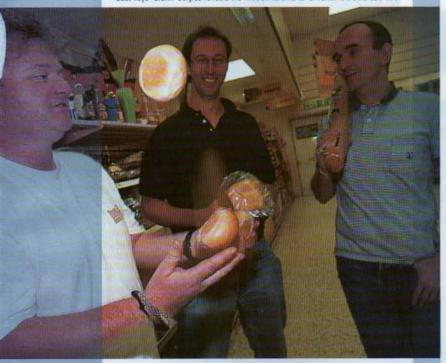
Worst thing about Guildford: "Too many developers."

Best kept secret: A local lass called Eugena.



Snack monsters: Lau-Kee, Jeremy Longley of Lost Toys, and EA's Danny Issac

Lost Toys' Glenn Corpes reveals his hidden talents to Criterion's David Lau-Kee



Bullfrog because of this', or 'I hated EA because of that', and I feel bad for those people. Because you want people to move on to something better."

Make or break

Some say there are two more potential startups-in-waiting at Bullfrog. Others note that those who talk most about leaving are the ones who never do.

And not every break-off will set up in Guildford, either. Demis Hassabis, the co-designer of Therne Park and an early member of Lionhead, founded his Elixir Studios in London. Elixir is thus the first spin-off of a spin-off. Perhaps he got out of Guildford to avoid the confusion.

"I've always lived in London and I love it," says Hassabis. More importantly, "The people we wanted were mainly from Cambridge and Oxford, and London was right in the middle."

But what about Molyneux's fears that London is too distracting to make good games? Hassabis admits some team members do allow themselves a break on Friday and Saturday evenings. "For the last couple of months we've been working until midnight," he says. "It's quite cool to go out for a quick pint in Camden then

It's unlikely that every Bullfrog break-off will be successful. One, the neatly named Negative Plus, has already been and gone. "They fell foul of one of the worst industry tricks you can fall foul of," says Peter Molyneux. "That's taking seed money from a publisher to do a demo." Such a technique can leave developers at the mercy of publishers. Negative Plus' founders are back to drawing pay cheques at Mucky Foot and Acclaim.

So does Molyneux feel any responsibility for all these new startups? If pushed, he'll admit he thinks he taught them to have confidence in their own ideas

"Now, that works well within a really tight team where everyone implicitly trusts everyone else," he explains. "But if you take individuals out of that team, they've got a lot of lengths to go to, to recreate that atmosphere"

"I'd hate to see any of them fail," he says. "I'd do anything I could to make sure they avoid that late - but I don't think they're going to fail. I know all these people and they're very cool."

Whatever happens, the Guildford game development community is set to grow. Criterion is looking to hire some 60 new staff, while Big Blue Box, Lost Toys and the other newcomers need at least 30 to 40 developers between them. Edgar is also likely to base his Internet games venture in town. Will Guildford's business folk ever recognise the abundant talent that lies within its city limits?

"None of us are in the Chamber of Commerce," says Molyneux. "I should go and say, 'Look, Guildford has the chance to be known as a real technological centre!"

"The games community is still very insular in its outlook," notes Edgar. "It's very

Fresh produce: The Next Mysterious Startup

Founded: 1999

Location: Somewhere in Guildford

Staff: TBC

Ex-Bullfrogers: You bet

Guildford natives: Unknown

Previous games: No

Upcoming. The big question

Biography: A second Lionhead Satellite that

Molyneux and co are protecting fiercely until a

publishing deal is finalised.

Favourite pub: Any - there's nothing else to do

right now

Best thing about Guildford: Having so many pubs to

Worst thing about Guildford: The waiting: How we hate it when our friends become successful.

Best kept secret. Themselves.

hard to see the benefit of meeting other businesses in Guildford. How does that relate to my international game market?

"When I moved Bullfrog from the Research Park, we took on 20,000 square feet - and we're a local company employing some 200 people that started out from two - we sent out a press release and..."

And nothing. "We could probably win the Queen's award for export," he says. "It's surprising they don't realise what's here."

Maybe they do. As David Lau-Kee, MD of Criterion, says, "I wonder if they're ashamed of us."

While it's highly unlikely that every startup will be as successful as Bullfrog has been, there's a chance that at least a couple of Lionhead, Mucky Foot, Lost Toys, Big Blue Box and the others will grow over the years. Who knows, maybe one will be bought by EA.

2009: The Chertsey break-offs. You read it here first.



nks to Alison Beasley, Glenn Corpes and the anagement of Tesco, Guildford, for their assistance in organising the photoshoot accompanying this feature

TESTSCREEN

The definitive monthly assessment of the world's latest videogames

The aim of the game

A s gaming is about to enter its fourth decade, it's interesting to note that even in this relatively short period of time a few distinct trends have been clearly detectable within the phenomenon.

Take gaming rewards, for example. Back in the days when you'd get excited at the prospect of playing a new game that offered the most absurd angular representation of life and its varied objects since the Introduction of Cubism, scores were all that mattered. Games weren't so much designed to be completed, but rather to provide you with an increasingly difficult challenge that would eventually claim all of your digital lives. If you need convincing, look no further than Billy Mitchell, the individual who recently became the first player to get a perfect score on Pac-Man after nearly 20 years' worth of attempts. Completing games in the late '70s and early '80s was the exception rather than the rule - as a result, the most accurate indication of your ability in relation to your fellow gamers was simply to compare final scores. In theory, the higher the number, the better the gamer.

The mid-'80s saw the arrival of the Japanese console and a change in videogaming rules. Perhaps as a reflection of that nation's highly organised social and business structure, with its emphasis on the group rather than the individual, the Japanese weren't so

interested in spending their leisure time amassing high figures as they were in completing a given challenge. They preferred the story to the glory, if you like. As a result, by the time Nintendo and Sega were invading Akihabara's stores with their 16bit creations, neatly packaged (and finishable) adventures were the norm.

And so it continued into the 32bit age. At least initially, for the latter half of the '90s has seen yet another evolutionary alteration. By targeting a wider audience than had previously been thought might enjoy videogames, Sony has had no small part in this phenomenon. Incapable of concentrating for more than a nanosecond at a time, this MTV-reared generation rejects the idea of having to spend any length of time on any given task. Furthermore, unconvinced that the best things come to those who wait, but rather to those who cheat, the late '90s gamer will cut any corners and remove any potential barrier (polygonal or otherwise) that requires him or her to invest any amount of effort into the experience

The number of 'pretty graphics, shallow gameplay' titles now available mirror the coin-op market's 'fiveminute entertainment' approach. And who would have thought that tips magazines would see people fighting over the last issue on the shelf? If gamers really want such shallow entertainment, they need only watch C5

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With a new millennium on the horizon, it's difficult not to be retrospective. (From left) Pac-Man, Zelda III and Tekken come from three successive decades, and demonstrate a shift in gaming goals

Every issue, Edge evaluates the best, most interesting, hyped, ovative or promising games on a scale of ten, where five naturally represents the middle value. A game receiving a 'seven out of ten', for example is a very competent title with noticeable flaws but which should still appeal to a considerable range of players. It does, after all, score two points above average and should therefore not be considered as such

Edge's rating system is fair progressive and balanced. An average game deserves an average mark - not, as many believe, seven out of ten

Videogames on the Edge

This month's gaming glories



(PS) Namco With the Soul Calibur

buzz in full effect. Edge returned to another favourite Namco beat 'em up. And it still plays like a swoony dream.



Unreal Tournament (PC) Epic

The latest shooter to make its way on to the office LAN provides buckets of blood and guts. For best results turn up the bots' levels and grab a flak cannon.



Tony Hawk's Pro Skater Zombie Revenge (PS) NeverSoft

PlayStation's fire with this on holiday abroad Edge streetwise gem. Using all the terrain is pure pleasure, disposing of much foreign and there are no prizes for currency on this Naomipulling the same trick twice. powered twoplayer horror



(Coin-op) Sega

Sony continues to stoke the Exploring arcades while thoroughly enjoyed

SOUL CALIBUR



The next generation has finally arrived. After picking up Soul Calibur, no one could deny that Namco's latest creation is anything other than a work of art – beautiful, fascinating, enthralling and downright thrilling, it eclipses expectations



Once started, the Mission Battle option is hard to stop. Rumour has it that further stages will be revealed via downloads from Namco's Website over the coming months

here are few who would dispute Namco's vastly important role in the success of PlayStation. The then-early adopters heard and felt the roar of *Ridge Racer*'s 'arcade perfect' visuals and gameplay, sending them sprinting towards their nearest importer. Some months later, *Tekken* hammered home the point that there was really no other choice than PlayStation.

It comes as little surprise, then, that Sega's stock value rose over 17 per cent on the day Namco's latest fighting game, Soul Calibur, was confirmed for Dreamcast by Namco. Based on the 1998 coin-op of the

same name, itself sequel to the coinop and PlayStation title Soul Edge
(dubbed Soul Blade in the west), the
Dreamcast version of Soul Calibur has
been entirely reworked from the
arcade original. For some developers,
that might translate into slightly
improved visuals and a couple of
extra play modes. Where Namco
is concerned, with its skills now
sharply honed from half a decade of
PlayStation development, it means
something entirely more significant.

Although both Soul Edge and Calibur were created for Sony's System-series arcade hardware, Namco's consumer development



Blows are painfully solid enough to make you wince

team has eschewed those boards' relative limitations and worked to Dreamcast's specifications. The result is simply beautiful, with motion capture, lighting, character interaction, and attention to detail unlike anything seen before. Passers-by the Edge office have been repeatedly brought to a slack-jawed standstill, gazing in wonder at Calibur's poetry in motion. The visuals summon memories of wondering when Killer Instinct's prerendered graphics would be

Passers-by the Edge office have been

repeatedly brought to a slack-jawed standstill, gazing in wonder at Soul Calibur's poetry in motion



The lighting is stunning, with solid shadows and varying ambience

possible in realtime, yet Soul Calibur is leagues beyond even those relatively recent ponderings.

When head-tracking first appeared in fighting games, it was hard not to be impressed, but where on the scale of amazement does that place Calibur's perfectly lip-synched postmatch taunts – complete with eyebrow contortions and winks? Play deep enough into the game and a mode is revealed allowing you to toy with each character's samples, marvelling at the effort expended on those fine facial animations.

Delving within the game to those kind of extents will not be the first thing that happens when the disk boots up. Skimming up and down the option menu and considering the various modes reinforces the extent that this game has expanded beyond its arcade roots - but that's precisely the choice most likely to be made. Initially, it's a disappointing one, following the Tekken formula to the letter, seemingly embellishing it only with those razor-sharp visuals, and an equally honed selection of weaponry. Complete the game with your chosen protagonist and you'll reveal an additional one, or, occasionally, an extra stage for the twoplayer mode.



As with other fighting games, Maxi's nunchuking ways (above, left) are likely to disappear when *Soul Calibur* makes its western appearance

It's likely that reasonably experienced gamers will haphazardly battle through the arcade mode in a few short hours, racing to reveal the various bonuses. Far less possible is that they'll begin to master the subtle nuances of each character, not least because of the 80-plus moves each has to offer. As in Tekken 2 and 3, these are listed within the game's pause menu, and range from single swipes to extensive combos. While several key combinations are shared

across the various fighters, the resultant action can be vastly different. Ivy, one of the female characters, has a sword capable of stretching into barbarous segments – much like a police Stinger – opening up a new range of attacks, while others wield axes, swords, knives, pole arms and fighting sticks.

Arguably, contemporary standards of artificial intelligence are not so prominent, though. More often than is acceptable, your opponent will simply Format: Dreamcast

Publisher: Namco

Developer: In-house

Price: ¥5,800 (£30); £60 (Import)

November (UK)

Release: Out now (Japan);







Credits earnt through completing the various missions can be spent in the Art Gallery to unlock hidden modes. The exhibition option (top) allows Namco's artists to show off their animation while you control the camera. Even more outrageous are the character profiles, which feature the facility to play back fighters' vocal samples. Also revealed by the mission system are passwords which, when entered into a special page within www.namco.co.jp unlock additiona online game guides



The final boss, Inferno (above, right), adjusts its fighting style after each bout, taking up the arms of the various characters available in the Arcade mode







Soul Calibur offers every imaginable permutation of the beat 'em up formula. Try invisible weapons (top), multiple bouts with one life (centre), and 'Kung Fu Master'

stand waiting for your attack. Bump up the difficulty setting or play almost through to the final boss, and the problem fades away as opponents begin to parry and counter more realistically. However, Virtua Fighter 3tb remains the supreme champion in the beat 'em up Al arena.

While graphical moments of wonder are everywhere, the truly rewarding segment of Soul Calibur's gameplay is the Mission Battle mode. At first this seems little more than a glorified training session, pitting you against an 'Edge Master' in a variety of combat situations, such as only being able to defeat him with throws or charged attacks. However, as more and more missions are unveiled across a three-screen-wide map, the huge assortment of gameplay on offer both dawns on and daunts you. In some missions you must simply vanquish three opponents using one life; in others your character is poisoned; or the wind is blowing against you; or you are balanced on a narrow ledge. The variations on the basic fighting game theme are incredibly diverse.

That, however, is only part of what Soul Calibur's Mission Battle mode has to offer. Success in the missions







Characters like Cervantes are recognisable from Soul Edge. Namco's vast pool of beat 'em up experience has flooded through the game

is rewarded with credits which can then be spent to unlock items in the game's art gallery. In turn, some of these activate added modes, missions, stages in the twoplayer game, and character costumes. They also open further sections in the gallery, which in turn offer more options, adding more missions, etc, to the main game. Edge so far has a total of 322 gallery pages available - the result of intensive playing. Parallels with the breadth of Gran Turismo's options are applicable, although Street Fighter Zero 3 might be more of a match for Soul Calibur in this respect. Unavoidably, Capcom's classic lacks the next-generation feel and accessibility of Namco's upstart.

Other modes such as Survival and Time Attack are included, and make for welcome diversions, while the twoplayer game is up there with the best. There is more to come, reportedly, with further stages unlockable after certain dates by visiting Namco's homepage via a Dreamcast. Right now, however, there is little need for those extras – that you've spent several uninterrupted days staring at the television, being drawn back to the joypad for session after further session, goes unnoticed.

Few games scream at you to play them, stealing away hours and days without you even caring. Soul Calibur is one such title. Gather a few friends together and you're transported back to the early days of the PlayStation and endless Tekken bouts, transfixed by a vision of the future. Just as it did when 32bit arrived, Namco has once more defined a new videogame era.

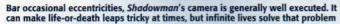
Edge rating:

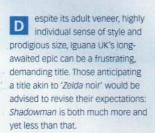
Nine out of ten

Use your loaf...

SHADOWMAN







Superficially, Shadowman's influences are openly apparent. Titular character Mike LeRoy is controlled in a manner not dissimilar to Link, up to and including the innovative lock-on combat system. Equally familiar is another Nintendo-sired gameplay device; the carefully managed acquisition of objects and abilities. Initially, the game's hub-like levels are packed with apparent dead ends and tantalisingly unreachable rooms or corridors. Finding the relevant power-up or item renders such obstructions obsolete, opening entirely new sections.

Iguana UK's adventure possesses a distinctive appearance, although its repetitive use of certain textures is a legacy of its cross-platform design. Its reliance on corridors, too, is reminiscent of the original *Tomb Raider*. While this can make navigation awkward, it does have the desirable side effect of making certain vistas both surprising and attractive. Approaching the Asylum, a huge building where much of *Shadowman's* areas are based. It's hard





The N64 version of Shadowman lacks the crisp resolution of its PC counterpart. Its use of fogging does not impair proceedings, though

not to be impressed by its sheer scale – even taking the relatively unadorned architecture into account. Better still, while approaching it from afar, the sight of its peak shrouded in cloud cover is truly outstanding.

Much has been made of the game's 'mature' status, and this billing is at least partly appropriate. Its cut-scenes are often abruptly short, and its dialogue is effective, if invariably throwaway. Of far greater atmospheric import is its usage of sound, which is consistently excellent. Although the relentless, piercing sound of Shadowman's default weapon - the Shadowgun - can prove irritating, the background music is subtle, and lends a mood to each area. Those with a PC supported by decent speakers and a 3D sound card will better appreciate its well-crafted and often spookily apt spot FX. There are far too many notable examples to relate here, but the sound of a dentist's drill within the Playhouse area of the Asylum, and the screams of assailants

as they are dispatched, are noteworthy.

For the first few hours of play, Shadowman appears fairly linear. Until the first encounter with the Asylum, the route forward is easily discerned, despite the sprawling, rather spartan nature of its maps. Your objective, at this point, is clear. locate and destroy The Five (harbingers of the apocalypse living in the real world), collecting dark souls and additional abilities as you progress. To appease the completist, there are also 'Cadeaux' to find. These are frequently hidden, but are worth the effort – for every hundred, Shadowman can increase his energy gauge.

With the revelation that
Shadowman is powerless against The
Five during daylight hours – a fact
alluded to artfully in a beautifully
illustrated book discovered at an early
point – his quest is altered somewhat.
And so it is for a near-thankless,
frustrating period, until each new area
is discovered and the total explorable
map space is increased. Unfortunately,







Shadowman's plentiful locales proffer an impressive level of detail and individuality

COMMAND & CONQUER: TIBERIAN SUN



With assailants, Shadowman often opts for weight of numbers over variety. It still manages the odd surprise, though

routes to new areas are often partially obscured, or at least not readily apparent. Lacking area maps to refer to, you find that you are expected to 'learn' each area, before embarking on painstaking, exhaustive exploration.

Literally hours can be wasted in pursuit of a concealed entrance to Dark Soul, which is required to open portals to new areas. It's difficult to understand why Iguana chose to take such a hardline approach. Even with onscreen maps (Zelda-style), Shadowman would remain a sizeable challenge – so why not provide them? Their absence makes play that bit less intuitive and, therefore, less gratifying.

Furthermore, the lock-on system cribbed from Zelda is a pale imitation of its polished inspiration. Prone to 'losing' a target, and next to useless in battles against three or more assailants, it can make close-confines combat a real trial. It's also disappointing that the battles are more hindrance than life-ordeath encounters. Once you have grasped the basics of strafing, taking damage almost becomes a by-product of impatience rather than wily enemy AI, its 'look' mode, too, is clumsy.

Between ten and 15 hours of play, though, Shadowman becomes a more positive, dynamic game to play. The new



Format: PC/Nintendo 64

Publisher: Acclaim

Developer: In-house (Iguana)

Price: £30 (PC); £40 (N64)

Release: Out now



Some of the visual spot effects are spectacular, particularly the harvesting of a dark soul (above)

Between ten and 15 hours of play, Shadowman becomes a more dynamic game to play. The new areas come thick and fast, and pathways to objects or souls become easier to open or find

areas come thick and fast, and – having grasped the required mindset – pathways to objects or souls become easier to open or find. Although battles are more commonplace and incrementally more difficult to win or avoid, Shadowman becomes, perversely, easier, more approachable and certainly more enjoyable.

But you can't help but wonder how many players will have the patience to make this discovery. Given that the likes of Metal Gear Solid, Silent Hill and even Resident Evil can be completed in the time that it takes to get to grips with Shadowman's obtuse, user-unfriendly nature, is Iguana dangerously preaching to the converted? Hardcore gamers will undoubtedly relish the challenge and, mouth pursed, survive its more barren stretches of play. But will the coveted

'mainstream' gamer have the same degree of determination? It's doubtful.

Gone are the days when an adventure game could justifiably supplement meagre content with featureless mazes. Today's gamers, quite reasonably, expect copious experiences, set pieces and able direction. Shadowman, near-peerlessly expansive in size and demands on player time, is a child of both eras, comprising the best and worst of each. The irony, perhaps, is that those players which its adult nature excludes from playing - young teens in particular represent the section of the gaming market with the requisite free time to complete it.

Edge rating:

Eight out of ten





The N64 version, visually inferior at a glance, is in fact superior in another important respect – analogue control

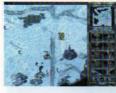
COMMAND & CONQUER: TIBERIAN SUN

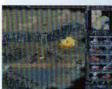


Tiberian Sun marks the return to battle of the Global Defence Initiative and the Brotherhood of NOD. Playing as NOD throws you into an internal power struggle before Kane is resurrected in the ever-entertaining FMV sequences









Environmental effects pep up the action. Cliffs can be blown away to create short cuts, while treacherous ice floes swallow tanks whole

rom the original, through *Red*Alert and myriad expansion
packs, gamers have voraciously
consumed the *C&C* series.

But it's been four years since Tiberian Sun was first tantalisingly trailed during the C&C end sequence. The weight of clones trying to tap the same vein of success has worn realtime strategy into a rut of Javanese trench proportions, while 3D accelerators have all but eradicated the humble isometric perspective. Given the circumstances and a threeyear development period, the world awaited a radical response from Westwood. The reality is, perhaps inevitably, an anti-climax. But now the reason for Westwood's news blackout. - which has stirred up anticipation for the game to a fever pitch - is apparent. There is no news. Tiberian Sun is a risk-free rerun of the Red Alert formula. While it may have voxel graphics, some new FMV, and a

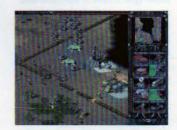
smattering of fresh units, it is essentially the same experience. Refined, yes. But cutting edge it is not.

Despite the missed opportunity, Tib Sun remains a good game because the formula still works. The basic premise of simultaneously controlling an army, while governing its potency by building bases and exploiting local resources, makes for a varied and stimulating set of challenges.

What's more, Westwood appears to have solved several perennial RTS problems that have bothered connoisseurs since the genre's inception. No longer is it possible to just steamroll an opponent, relying onweight of numbers to overcome a deficiency of 'skill. Tiberian Sun's missions have been finely tuned by rationing ore so that there's just enough to fund the next offensive. This dynamic forces the pace on every level, compelling the player to seize the initiative and to attempt high-risk

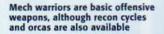
assaults on the next objective (usually a cash-rich ore field). Scarcity of resources raises the status of every unit. Each one is a prized asset that must be zealously preserved if the player is to prevail. Without the knowledge of certain victory, every unit's destruction represents an emotional loss that imbues the missions with an edgy tension rarely experienced in the genre.

This balancing act reaches its climax in multiplayer games. Every



Fans will note that the interface has not undergone any changes

RANDIAP IAP



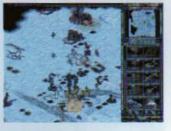
RTS game released inevitably throws up a super-unit that undermines the developer's efforts to create varied forces. However, this flaw appears to have been solved in *Tiberian Sun* by limiting the most powerful units – like the Mammoth II tank – to one per side, and by specialising every unit to the point where it must be used in a combined force to succeed. Thus players are driven to come up with increasingly inventive strategies to overcome an enemy they can't simply cudgel into submission.

Crucially, many of the units are also fun to use, like the tunnelling tanks that suddenly explode under the enemy's nose in a shower of dirt and surprise. Or the Cyborg terminators who get their legs blown off in firefights, but carry on crawling and fighting regardless.

Yet despite the game's evident craftsmanship, it does not command the respect of its predecessors. Too many recycled ideas lead to an inevitable sense of familiarity. Faced by a lethal set of base defences? Then destroy their unguarded power sources as per Red Alert three years ago and C&C four years ago.

And the voxel graphics are a big mistake. While the backgrounds







Format: PC

Studios
Price: £40
Release: Out now

Publisher: Electronic Arts

Developer: Westwood



The voxel graphics, while a huge improvement over Red Alert's pixels, pale in comparison to the polygons of Total Annihilation



Without the knowledge of certain victory, every unit's

destruction represents an emotional loss that imbues the
missions with an edgy tension rarely experienced in the genre

remain attractive enough – despite retaining the same basic patterns as Red Alert – the units are generally awful. Aircraft stutter unconvincingly through the atmosphere while ground vehicles seem unfamiliar with the principles of traction. And every one suffers from blocky pixelation and a lack of detail – all classic voxel defects.

Most frustrating of all, the maps are still arranged according to a maze ethic that means, in most cases, they become a long slog. No matter how inventive a player may be, they are still restricted to accomplishing the objectives in the preordained order.

Tiberian Sun should have been the Half-Life of RTS, surprising the player by using the conventions of the genre against them and forcing new solutions to familiar challenges. Westwood occasionally dips into this territory, which is enough to make Sun worth playing, but not enough to make it any more than Red Alert Plus.

Edge rating:

Seven out of ten

UNREAL TOURNAMENT

Format: PC

Publisher: GT Interactive

Developer: Epic

Price: £40

Release: Out now







As with Quake, shields and weapon power-ups are crucial to boosting your frag count. The shield belt (above) takes your armour to its maximum level



Playing in the assault mode (above) gives you control of a team of up to five bots, which must be used tactically in order to fulfil the mission objectives

hile most developers are trying to bulk out their game narrative, firstperson shooters are perversely hellbent on heading in the opposite direction. Maybe the complexity of Half-Life has scared off the opposition. But plot has always been a vestigial element in Quake and Unreal circles; all players wanted were new ways of blowing everyone apart. And with Epic and id taking the idea to its logical conclusion – the singleplayer game as the quasi-multiplayer experience – only fragging requires your attention.

Unreal Tournament provides the first opportunity to test whether that grand scheme works. Structured around the online experience, each level of the singleplayer game throws you against a variety of computer-controlled bots. Beginning with one-on-one, the number of opponents rises steadily. The only objective is to be the first to a certain amount of kills.

And while Epic has crafted its usual beautiful environments, with beefed-up, reskinned weaponry, excellent level design and streamlined online playability, the question remains: how good is the bots' Ai? The answer, sadly, is better than before, but still not sophisticated enough.

It's easy enough to make bots that attack without power-ups and godlike ones that never miss, but neither is interesting to play against. What players want is bots that demonstrate human behaviour. Epic has attempted this, giving each of them a characteristic fighting style; but the opportunity provided by the tournament theme of the game is ignored. It is striking, for example, that when the bot wins, it's a different individual each time.

The issue of AI is even more obvious in the other game modes,









While you can jack up the bots' strength, problems with their Al become apparent playing CTF

capture the flag, domination and assault. No matter how powerful they are individually, the bots' teams are hopeless at things that even average players do instinctively. This is particularly stark when using the default settings.

However, the one saving grace is the practice mode. This enables you to customise level settings, and it's here the game shines. The number of bots can be chosen, as well as their strength, accuracy and camping ability. Less direct elements such as the level of friendly fire and gravity can also be tweaked. And although it's unlikely to withstand the assault of Quake III, especially in the online stakes, Unreal Tournament will definitely fill the gap. Even if it doesn't entirely validate the concept of the bot deathmatch.

Edge rating:

Seven out of ten





Forget aliens, Unreal Tournament is about fragging humanoids in multiplayer mode

DARKSTONE







Developer: Delphine Price: £35

Publisher: Electronic Arts

Format: PC

Release: Out now

There are many types of enemy to face, ranging from skeletons to dark knights

Iready slated as a Diablo clone, Darkstone is a far more slippery beast. Its visual wizardry seems certain to outshine Blizzard's sequel, for a start. More importantly, though, Darkstone is a testament to the flexibility of the point-and-click interface. The most intuitive way to move characters around a computergenerated world, Delphine has pushed this staple of RPG gaming further than it's gone before. Combined with a completely controllable camera and a powerful 3D engine with beautiful transparency effects, it provides players with an incredibly versatile gameplay tool. On a technical level, at least, then, Darkstone has the potential to open up a genre that has recently tended to be an endurance test.



Before heading into dungeons, players must cross hostile lands



One of the game's best features is the quality of its realtime lighting. Unfortunately, the charisma of the characters makes far less impact

This ease of entry also affects the character attributes so beloved by hardcore RPG gamers. There are the usual classes - warrior, thief, priest and wizard - but in another innovative move, two characters can be selected. The player controls one, with the other relying on its Al. Switching between them adds valuable tactical options, especially when the enemy mixes long-range attacks with close-quarters combat. With all this streamlining, and a dragand-drop inventory, it's no surprise that Darkstone is one of the simplest RPGs to pick up and play.

Its undoing, unfortunately, is more fundamental. Despite the ability to zoom right in on your two polygonal characters, there's little emotional depth or attachment to the game. Impressive technicalities aside, Darkstone is a typical mixture of killing

goblins, finding items, taking them back to town, restocking resources and then heading out again. Even the small number of NPCs exist purely to provide sub-missions – there's no sense that they are actually alive. There's not much venom in Draak, the evil dragon/priest at the heart of the story, either. And this makes the 30-odd levels that you must conquer to defeat him an empty experience.

The particle effects and realtime lighting generated by the multitude of magic spells are fantastic, and it is certainly one of the most cleanly presented PC games you're ever likely to see. But Darkstone lacks passion, and that's a fatal flaw in any roleplaying game, no matter how innovative and easy it is to play.

Edge rating:

Six out of ten







One of Darkstone's best features is the option for two characters. You can switch the lead between them or break the link to allow solo play as well

AIRFORCE DELTA

Format: Dreamcast

Publisher: Konami

Developer: In-house

Price: £45 (Import)

Release: Out now (Japan)





The presentation is marvellous, with beautifully realised briefing maps and options screens adding much to the military atmosphere

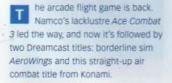




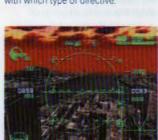
Although missions are technically similar, the diverse locations and targets (trains, boats, planes, buildings) add to the gameplay value



This canyon mission brings to mind the Star Wars coin-op's trench scene



The setup is simple; you're a mercenary who flies missions for money. It can be anything, from dogfighting with enemy planes to destroying ground facilities or guarding other craft, so long as it pays. The cash rewards garnered from completing missions are then used to buy new aircraft, which are graded for speed, power, defence and mobility. There are over 30 to collect. all drawn from real life, and it's up to you to work out which aircraft go with which type of directive.









The background visuals are astounding in places, the varied landscapes often pushing towards photorealism. Again, this accentuates atmosphere

Accompanying this idiot-friendly plot is a similarly foolproof set of controls. The analogue stick handles movement, triggers are for speed, while buttons are for missiles and guns. Experts can choose a more challenging arrangement, but true propellerheads will no doubt look at the teeny instruction booklet and run a mile. In Airforce Delta you may be piloting a MiG-29 or F-22, but this is pure hair-trigger gaming - you point the plane at the baddies and shoot.

Gorgeous scenery, dozens of targets, and a flight engine that has you soaring through canyons and under bridges with gut-wrenching realism, manages to save the game from mediocrity. And although that perennial problem of the flight shooter - lack of mission variety - is present, at least the things you're protecting/blowing up look great and put up a decent fight.

In short, Airforce Delta does exactly what a fighter plane shoot 'em up is supposed to do, and it does so with style and grit. No matter what you feel about flight sims, there are few gaming experiences quite as satisfying as targeting an enemy ship, firing off two missiles and then flying in low overhead as it explodes into a billion fragments. Konami knows this, and Airforce Delta is ripe with such moments. What's more, they're placed within a visually captivating world. wrapped up with great stereo sound and marvellous presentation. Nonflight fans may only last a few minutes of furious blasting, but to those who think Namco's finest trilogy is Ace Combat, not Tekken, this is sheer, if simplistic, aerial sex

Edge rating:

Seven out of ten

RC STUNT COPTER

Format: PlayStation

Publisher: Interplay

Developer: Shiny Entertainment

Price: £45

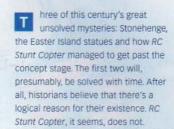
Release: Out now







The infuriating handling and time limits make the tasks incredibly hard



As a remote-controlled helicopter simulation, Dave Perry's latest is in a league of its own. Literally, Because for what now appear to be all too obvious reasons, no developer has yet attempted to recreate the amusement of piloting a miniature whirlybird around various obscure air assault courses. None, it's safe to assume, will ever attempt it again.

The basic premise involves little more than steering your copter safely through myriad levels, the object of each being either to perform a simple flying feat or a more complex series of stunts while up against a strict time limit. It sounds easy, but even the early courses are rendered problematic by the chopper's twitchy handling.

The PlayStation's dual analogue sticks are used simultaneously to control banking and acceleration, but although the realism of movement isn't in question, the steepness of the learning curve contrives to make this



The challenges you face are less than inspiring, and usually revolve around flying through mid-air obstacles and shooting suspended targets

arcade-style flight sim a nightmare to control. A useful (if patronising) tutorial attempts to teach the basics of copter control, but once in the game proper, even the first task (flying between two enormous American football goalposts) presents a very real problem. Infinitesimal stick movements result in wildly exaggerated onscreen manoeuvres, making even the task of hitting the side of a huge barn incredibly tough.

It's laudable that Shiny is endeavouring to simulate such niche activities for the PlayStation, and it's even more praiseworthy that it has managed to do it so accurately.
Ironically, it's the realism of RC Stunt
Copter that contributes to its failure
as an enjoyable alternative take on
a well-established genre. It may be
visually appealing, with the kind of offthe-wall challenge that would appeal
to younger gamers, but it's simply too
tricky to control and too esoteric in
concept to excite anyone but die-hard
fans of RC 'copters. It's a brave
attempt at something new, but
then so was the Sinclair C5.

Edge rating:

Four out of ten







RC Stunt Copter's training mode is woefully inadequate for teaching you the game's basic skill set

d e v e i o p videogame creation under the microscope

DIY 3D game design: ClickTeam's solution for home coders

ith a reputation based on legendary utilities such as STOS Basic, AMOS Basic and Klik & Play, it's no surprise to find François Lionet and Yves Lamoureux of ClickTeam at the forefront of another innovative product. JAMA3D, which stands for Javascript Multimedia Authoring in 3D, is a simple but powerful 2D and 3D game development application,

designed for home programmers and multimedia creatives. Based around a self-developed 3D engine, JAMA3D will provide talented amateurs with their most capable game authoring tool to date.

The key to JAMA3D, according to Lionet, is its use of an enhanced Javascript interpreter. With this object-orientated language and a simple drag-and-drop

interface, users can create their own objects and re-use them later in other programs. The language is already well-known, thanks to its ubiquity on the Web, and it also means JAMA3D is truly cross-platform.

The 3D engine is another aspect that ClickTeam is proud of, although it acknowledges that it's obviously not as fast as the optimised engines used by commercial game developers. As befits its general-purpose nature, the JAMA engine runs about 20 per cent slower than leading poly pushers, according to Lionet. However, its features list is impressive: bilinear filtering, inverse kinematics and Gouraud and Lambert shading, as well as realtime mirrors and hierarchical objects figure. And, although it supports D3D, OpenGL and Glide, the engine works on any machine irrespective of whether or not it has 3D acceleration.

Release code is expected to be available for download in late September. The home user licence costs £60 and will feature a small JAMA3D logo at the start and end of each application. The professional version, costing £1,490, is functionally the same, simply without the logos. And although Clickteam is excited that French developers have already shown interest in using it for prototyping ideas, Lionet's real targets are bedroom coders. Although it will give their imaginations more space in which to run riot, whether it will generate the next generation of Laras, as he suggests, is a different matter.

A beta version of JAMA3D can be downloaded from www.clickteam.com.





The latest addition to ClickTeam's legendary stable, JAMA3D provides a simple interface which enables users to cope with 3D models, animation and sound effects within the same Windows environment

WorkStation

reviously an illustrator for the defence industry, generating artwork for the US military, Red Storm's Travis Getz has found his calling as an artist working on Rainbow 6 sequel Rogue Spear. An aviation freak, his corner of the office is covered in aircraft paraphernalia And, for reasons best known to himself, he also collects mouse mats

Posters the "Marines knock em down," appenently, while the poster beneath is an example of knock work from the previous job. a SLAM missile taking out a target possibly a known marine tartury in kno. And those with a discerning eye will also notice a P-40 Washawk of the Flying Rigers and a P-51 Mustage, unling around the atmost obligatory. Empire Strikes Back print.

Motorised BF 110 This is Cert's pride and joy. The Masserschmitt fighter bomber corres complete with codepit and wing lighting and sound effects. Best of all, the propellers go round, too. And continuing the WWI thems, next to it uss a model Sorfice.



Schitz malt liquor "My Invourse dark at college" recalls Getr with a generic it gives a new meaning to the please "When the Schitz hits the fan

aAbsolutely tons of game figures lest across the mad from the Red Show offices is a lerge Toys Tr. Us seconds shop, filled to the colling with chean game figures, Rmident Eel 2 and Marvel Robots are just some of the examples on display.

Members of the development community (serie or otherwise) are invited to email WorkStation submissions to edge@futurenet.co.uk

The trials of a start-up developer: part 14

After co-founding Lionhead Studios with Peter Molyneux, **Demis Hassabis** set up his own development house, Elixir Studios. In this exclusive diary, he manages to prop open his eyelids long enough to recall the human stories behind development deadlines

Labour of love or living hell?

"The single most important quality in a developer is a love for games. You've really got to love them

because making them can at times be living hell. The last couple of weeks has been just such a time for us. I am, of course, talking about deadlines.

This month we presented our first game at the Eidos publishing meeting. This was the first time most people at Eidos had seen what we were working on. We've kept very quiet about our game, so much so that only a handful of people outside the company know what we're actually producing. This is unusual, but something we wanted to do.

6am every day, stealing four hours of sleep in the board room in between. Although programmers are often nocturnal creatures, some of the team are daytime people. As a result, you get a day shift and the night shift. One moming the day shift met the night shift in MacDonalds on Camden High Street at 7am in the morning. There was some confusion over whether it was dinner or breakfast that was being eaten.

The question you're probably asking is, why is this necessary? There are three reasons for this. The first is quite simple and it involves the nature of programming. In very simplistic terms, programming is about problem-solving and, as with most problems, you can never be sure how long

can your game! And who can blame them? Developers, given their own way, would spend years crafting their own magnum opus, unconcerned by commercial reality. Most of the major publishers are quoted on various stock exchanges around the world and as such are driven by the need to post quarterly profits to keep their shareholders happy. They tell their investors that their sales will be X based on game Y being released in, say, the second quarter of the financial year. If that game slips to the next quarter or, horror of horrors, to the next financial year, the confidence of the financial community is dented, with potentially disastrous effects. A sad, if vivid, example of this can be seen in the present plight of GT Interactive – three games slipped

"We bought half a dozen sleeping bags, filled the deep freezer with ready-made meals, stocked up on vital supplies such as baked beans, vitamins and coffee, and set up an account at the local curry house"

Come the end of July, 30 of Eidos's most senior executives, including the CEOs of Eidos US, Japan, UK and Germany, gathered in a cavernous boardroom in a vast country house, waiting to see what they've been paying for all this time. It was a pretty important deadline.

You can talk about and prepare for the looming deadline, but it's only when you actually reach it that reality breaks. I've been through this before with Theme Park, but for some of the others on the team it was their first development deadline experience. A month ago I asked Sue, Elixir office manager and Mother Hen, to get everything in place. She went out and bought half a dozen sleeping bags and filled the deep freezer with ready-made meals. We stocked up on vital supplies such as baked beans, vitamins and coffee. The local curry house was briefed in advance to expect a massive surge in demand and an account was set up (never underestimate the healing properties of a light vindaloo at night). Nick went off to PC World to buy extra PCs to minimise the amount of time spent waiting for code to compile. Tim, our engine programmer, no longer satisfied with the two computers on his desk, was given a third. He now sits surrounded by a bank of three monitors, furiously coding from one to the other.

By late June we were working at a ferocious pace. It's at this point that normality recedes to the periphery of your imagination. It becomes impossible to distinguish between 'day' and 'night', 'week' and 'weekend', 'job' and 'life'. As I lie in bed each morning, lines of code rather than fence-leaping sheep send me to sleep. Fashion, never a strong point in our office, reaches crisis point. Mouldy trainers and scruffy shorts are the order of the day. A few beards have been grown, although too few to answer the burning question: do all men have ginger in their beards?

The last two weeks were murderous. The main programmers and myself were working from 10am till they're going to take to solve. Nor can you anticipate every problem that will arise.

The second reason is that if you give programmers more time, they'll take it. There's always just one more cool feature that needs to be put in. If we could, we'd be forever changing, tweaking and shaping the game to our hearts' content. Were it not for these milestones and the herculean effort that goes with them, games would take four years to complete rather than two.

The third reason is that publishers set demanding deadlines. When you strip away the niceties, the milestone is effectively the publisher's way of saying, 'Do this or we'll

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Come the end of July, 30 of Eidos's most senior executives, gathered in a vast country house to see what they'd been paying for all this time

(Driver, TA Kingdoms and Unreal Tournament) causing the company to post calamitous results for the last financial year. The owners have since put the publisher up for sale. And this was a company that was until very recently the second largest publisher in Europe. So you can see why publishers push developers to hit their milestones.

On another subject altogether, you can make an amazing game, but if no one knows about it it will disappear without trace. As a developer you spend a lot of time talking to the press and trying to get coverage for your game. It's time consuming, but I enjoy it as most journalists are gamers so you've always got something in common. I've recently discovered that it can cause a lot of problems, though.

I read an interview with the actor Robert Carlyle (Begbie from 'Trainspotting') recently in which he said he always carried a tape recorder to interviews. At the time I thought this was pretty prima donna-ish, but after recent events I think Lunderstand why. I did an interview with an American magazine and they basically invented a quote, which had me describing Quake players as geeky teenagers on a power trip. I've spent the last couple of weeks frantically trying to let people know the truth before my inbox collapsed beneath a deluge of poisonous emails. These ranged from the moronic ('I hope the gaming community spits on yur [sic] limey wanker grave') to the hilanous ('I assume I'm addressing a bunch of poorly dressed, acneridden, under-sexed, cubicle-dwelling troglodytes that get their jollies ogling Lara Croft images enhanced in Photoshop in between Twinkies and lines of code, right?'). Worse still, my own team, fanatical Quake players, threatened to string me up. I think the thing that really irritates me is that I love-Quake. I have pretty strong feelings about violence and games, but they're commercial, not moral (as I discussed in my last diary). Prima donna or not, I'm getting a tape recorder."

The trials of a rock'n'roll games publisher: part four

Brian Baglow, public relations manager at Rockstar Games, recounts the tricks and traumas involved in producing Grand Theft Auto 2, the sequel to one of the most successful games in recent years. This month he takes you back to the very beginning, where all the best stories start...

o, we rewrote the graphics engine; we tore the Al apart and put it back together again so now pedestrians are smarter than your average games magazine hack; and the car handling, police response and gang dynamics are more finely balanced than a ballerina on speed. But what about the missions? A good one'll drag you into a game and keep you glued to the screen like an unemployed pervert to a 'This Morning' lingerie special.

But before any of the missions could be created, the three level designers working on GTA2 had to create the city itself. And the city is huge. Very, very big in fact. So to create it and, more importantly, to make it coherent and believable, took a lot of rather clever design and a little sprinkle of fairy dust.

"The idea is to provide context," explains **Willie Mills**, creator of the Downtown level. "Not only for the missions or The level design of the original GTA was accomplished using a 2D editor. The city was built up in levels, starting at the bottom (which was the water). Each tile in the game – both horizontal and vertical – had to be placed by hand to create both roads and buildings. For GTA2, however, a much more sophisticated 3D level editor was written.

"While we were designing the GTA maps it was obvious that there was so much more we could do with the city," declares **Billy Thomson** (creator of the Industrial sector — the third and hardest level of the game). "The way we work now is to design an area of the map first — normally working from an initial mission idea. The landmarks, roads, zones, buildings and lights all come from this initial phase. We can then go to the artists and work with them to create a list of the tiles and building blocks required for that particular area.

commands and triggers we could use to set up missions.

That system was okay in the first game, and the missions were solid and exciting, but to exploit the gang system in

GTA2 we had to create a completely new scripting system."

This was one of the priority tasks at the very beginning of the game. Both Dave Jones and Gary Penn are huge advocates of the design-driven game — giving level designers the freedom to let their imaginations run wild.

"We had to create a completely flexible system," says Baird. "You can't anticipate all of the things which will occur to the level designers, so you have to give them a system which will, hopefully, allow them to create missions that were never thought of when the scripting language or the game itself was being designed." The system, which Baird eventually developed, is essentially a higher level version of the C programming language. "The advantage of this is that the very basic structures used in programming – iteration, functions, WHILE loops, multitasking, etc. – provide a system which can build very sophisticated missions structures."

For the missions themselves, the level designers had an exciting new resource – a scriptwriter. **Mike Keillor** is the man responsible for all the background narrative, gang information and characterisation within *GTA2*. It was clear to him early on that writing a 'story' for a game like this was not going to be simple: "A major problem trying to create a plot or story arc within the game is the amount of freedom which the player is given. He can work for any of the gangs in the level, the missions available depend on the level of respect with that gang, and the missions can be picked up in any order. For a scriptwriter this creates some momentous problems. For instance, if you have a character in one mission who actually appears in the game, then he's vulnerable. The player can run him over or shoot him in the head. You can run into some major continuity problems."

Despite the problems, Keillor has been an invaluable aid to the designers. "I can sit down with the guys and listen to their ideas for missions," he says. "If they have a specific idea for something, say hijacking a train, destroying a building or doing something particularly nasty to a coachload of people, I'll try to find a context for it. If you can create a plausible explanation for a mission, then you can write the mission briefs and work it into the overall level and story.

The storyline itself is a closely guarded secret. "There is a very strong thread running through the game," Keillor confides. "The nature of the game makes it difficult to retain a conventional story thread, forcing a "Usual Suspects'-style dislocation to keep the player hooked. You'll get subtle hints throughout the game which will allude to a conspiracy which exists within the city. If you can put the clues together it may well give you some idea of who the real enemy is and who you should be fighting for control of the city."

It's not all ultra-violence and car theft.

"A major problem trying to create a plot or story arc within the game is the amount of freedom which the player is given. You can run into some major continuity problems"

narrative, but for the game itself. If you just throw a load of buildings into a map, join them up with roads and drop a few trees in, your missions get boring very quickly."

"You have to create a background for the game to happen on," says **Steve Banks**, who is completing the Residential map. "What we found in the first game was that in a city of this size, you have to be aware of extremes and use them to your advantage." Tight, claustrophobic spaces add to the intensity of the missions — allowing gang members, police cars and bodies to really pile up. Open spaces have to be in there, too, to enable people to go wild in the cars and practice their hit-and-run skills. Of course, in order to appreciate the extremes in the map, you have to plan the more 'normal' areas, too,

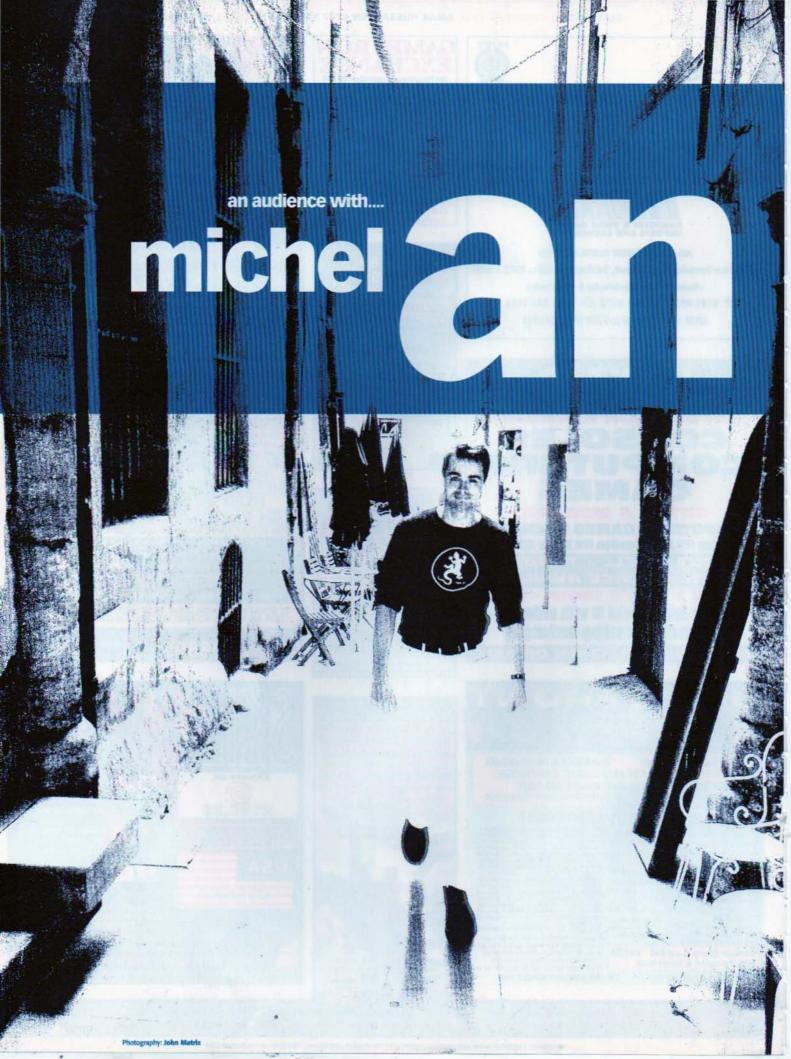
The 3D editor allows us to design more complex buildings and use the graphics tileset to better effect. We can design something that we think will look good and check it out immediately. If it doesn't work from the top-down perspective then there's no point keeping it in the game."

The efficiency of the new editor has meant that the designers have had more time to concentrate on refining and polishing the missions themselves. This is important because the new Al routines, scripting language and, most importantly, the gang dynamics within the game have created a far more complex system than that of GTA.

"The range of missions has increased by a factor of ten," explains **Brian Baird**, who wrote the scripting for both GTA and GTA2. "In the original there were several dozen



From left: Steve Banks, Billy Thomson and Willie Mills, the DMA crew responsible for the fundamental design elements of GTA2. Their roles are given extra value because of head honcho Dave Jones' belief in the skill sets of their disciplines





His character has made its way into around four million homes worldwide and yet he remains an anonymous character himself. Edge talks to France's answer to Shigeru Miyamoto...

round ten years ago, **Michel Ancel** began toying with an idea. He'd been tinkering with an animation sequence on his 16bit home computer, generating a distinctively oddball character with no arms, no legs, big eyes, and floppy ears, and he thought it might be worth his while sending his demo to UbiSoft, which, along with Infogrames, was one of France's biggest software publishers at the time. It was to prove a shrewd move: the company liked the concept so much that it brought Ancel in-house with the intention of realising the potential of his character in a videogame.

Some years later, Rayman was born, and UbiSoft set about pushing the technicolour 2D platformer on to as many consoles as could possibly take it, including the Jaguar and PlayStation. The game was released during the early life of both of those formats and went on to sell several million copies, confounding critics who perceived it to be simply a pretty-looking platform game.

Today, Ancel is overseeing the creative input of Rayman 2, the full-3D sequel previewed on p46, from a cramped townhouse office in Montpellier in the south of France. The working conditions here are patently inefficient: wires trail across the carpeted floorspace between the six or so rooms, just begging to be tripped over, while a lack of air conditioning sees one artist traipsing around his workplace in nothing but a pair of shorts. This is an unconventional setup, and fears are confounded further when Edge learns of the holidaying habits of one of the Montpellier studio's key artists. It transpires that Jacques Exertier, a UbiSoft creative responsible for character design on Rayman 2, likes to take a once-a-year break in the middle of the Amazon jungle. On his own. With no food. "It's odd, really," says Ancel, "because I never know whether or not he's going to make it back. He survives by eating insects and things."

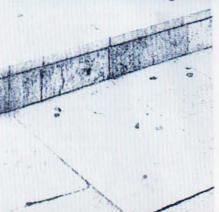
Ancel isn't quite so eccentric, although his videogame-obsessed mind occasionally runs riot during conversation, his grasp of English struggling to enunciate the hyperactive fizzles that must keep him awake at night.

He lists Zelda III and Galaxian among his favourite games of all time, and, when asked what he would like to deliver to the game-buying public, he recalls the classic rain-drenched scene at the end of 'Blade Runner', when Rutger Hauer's character speaks of the spectacles he's witnessed during his life. Those are the kinds of places Ancel wants to take players.

Edge crossed the Anglo-Gallic barriers in an effort to explore his vision...

Edge: What do you think about how videogames have progressed since you started, when you first designed *Rayman*'s animation sequence on an Atari ST?





Michel Ancel: We have moved away from thinking, 'Okay, look, the engine is capable of managing 1,000 space ships simultaneously – that is incredible'. There is no interest in that any more. We can now imagine stories that we couldn't before, and the way we will use this will be interesting. I don't think technology is telling great stories. I have been in videogames for more than ten years now, and it's funny seeing certain types of graphics that just fly around because it has become expected. Developers are committed to using up what's available, and that's normal – you discover it, it's incredible, but one year later it becomes normal. All the kids are used to 3D things – they all seem natural now. So we should move far away from this. Consider when you are watching a movie: if you have too many action sequences or too many special effects, there is no interest in the next special effect because it would simply be one more. But if you have the right special effect in the right place, the movie is using the technology efficiently. You get more value.

If you look at certain examples of Japanese animation – something like 'My Neighbour Totoro', for example – the creators made a film that was occasionally very funny because of strong characters. The animation runs at a very limited frame rate, but when you have a very good sequence it stands out. All of the technology is there to push the emotion at the right time, and the creators don't want to simply use it over and over again for the sake of it. Sometimes it's good to not put in absolutely everything.

There's almost a kind of prison, where the technology is the same, and we have to manage it, and know how to control hundreds of characters and adjust all the textures and all these things... And I think the Japanese, because they are looking more towards the emotional content, are more capable of considering the final impact than the technological aspects. That's no problem for them. That is their tool – emotion. They want to explore new themes, they want to create funny characters, they want to represent journeys, they want to write it all because these are the things kids dream of at night, and that is the goal. The technology, well, it's just the method of getting there. And I think that's the way we should use it.

Edge: Do you think there's a parallel between Japan and France in terms of creativity? Both nations seem to use approaches different to those of most UK creatives.

MA: That's a very good question, but a difficult one to answer. I'm not really a fan of all Japanese things. I play games. They are special in Japan and I am more connected to these people than I am to all the other aspects.

So I cannot answer the question with regard to all the other aspects.

Edge: Something you definitely have in common with Japanese development is that the team behind *Rayman 2* is absolutely huge...

MA: Yes. Actually, we have a vision. We have brought in a new team for a new project, and the core team will never be more than 30 people. This is a good balance because we are working on ambitious projects that need a lot of graphical inspiration, lots of data, and many other things, but I want to get back to that good feeling when you know you've been working on a project when it was just three, four or five people, with one code 'magician', one special artist, etc, etc. The responsibilities, the connection between the team, is very strong that way. And actually what you have seen in my office here in Montpellier is very close to that kind of setup. So it's a balance between the SquareSoft sort of approach, and the closer approach, and we meet in the middle. I think the goal is to be able to manage ambitious projects. With a racing game or a fighting game, they are quite interesting projects, but they do not quite offer the same situations as I am really interested in, in terms of characters and design. For this kind of project, I mean a Zeldo-like project - something very ambitious where you want to spend hours playing it; you want it to twist and turn. To create this kind of game you need to try out a lot of ideas, and only then can the concepts crystallise. So you need a certain amount of other people - you can't do that with ten people. Well, it could be possible, but you'd need four years and maybe you would not have the same energy. For example, when a graphic artist believes he is missing inspiration, with a very small team I could not say, 'Find another one to help him'. I just think that's why it's good to have four or five graphic artists - when one is tired, he can be helped. I think this works very well for us - after a long period of development, going through many experiences, we have found a formula - the best mix which means a larger team is needed.

Edge: But if, as you suggest, a member of the team gets tired and needs to be replaced, how does the new person maintain the other's vision? Where does the focus come from?

"One very important tool I use is working on paper. This means visuals can be developed very quickly to allow people to know what will be in the game, what the 'spirit' is like"

MA: One very important tool I use is working on paper. This means visuals can be developed very quickly to allow people to know what will be in the game, what the 'spirit' is like. It's like storyboards for movies – everybody can see the vision of the script.

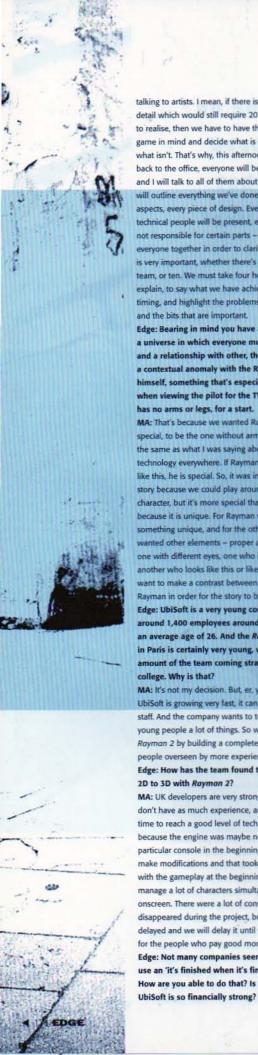
If you have good tools like that you can say, 'Okay, you are doing this part, this is your part of the process, and you can take this other part'. We need to have a vision of the game, even if it's not very precise. We don't need to have 200 sheets of paper; I'm not saying that all of the game is on paper - that is not good. But we need to be clear about what we want, outlining the main themes, what we want to express with the game. We want the character to travel but not get lost. We want characters to take care of other characters - these are the main ideas we want to look at. With a story we want to go and look at size and space; we need to give travelling sensations; we need faraway places. But with the sensation of travel you have to be aware of the different feelings that exotic places offer. Many things are involved. To get to people's emotions, we are creating worlds that are precise, but we try to leave space for creativity.

When you are in the game, you are the most important character – you are pushing the screenplay of the game, its vision. But there is a danger of hitting restrictions, so we shouldn't make it too clear on paper because it will never be the same as when your emotions are actually involved in the game, when your characters are really talking or really fighting, when the gameplay is there. Maybe 20 per cent of the work is done at the paper stage; then it becomes yours to modify and tune, to create and direct, using good tools. That is the process.

Edge: You have some extraordinarily talented traditional artists here. What do they think when they produce a fantastic-looking character and it has to be turned into something consisting of only 200 polygons, where the fine detail has to be thrown aside?

MA: Sometimes they say, 'Michel, you shouldn't even consider this character because it would be impossible to produce with polygons'. But that's bound to happen. We know that some of the fine aspects couldn't easily be done with polygons as our building blocks. So the artists are trying to create characters that will fit the limited polygons available. But then to prevent artists being unhappy, I'm always thinking about still looking at concepts that should be impossible to realise with polygons. I have tried talking to artists, asking, 'Do you think this could be possible?' But to help me in asking them are the technical guys, who I speak to before





talking to artists. I mean, if there is just a small detail which would still require 20 or 100 polygons to realise, then we have to have the quality of the game in mind and decide what is important and what isn't. That's why, this afternoon, when I get back to the office, everyone will be in one room and I will talk to all of them about the storyboard. I will outline everything we've done, all the technical aspects, every piece of design. Even the nontechnical people will be present, even the people not responsible for certain parts - we must bring everyone together in order to clarify the vision. This is very important, whether there's 30 people on a team, or ten. We must take four hours out to explain, to say what we have achieved, explain the timing, and highlight the problems, the good points and the bits that are important.

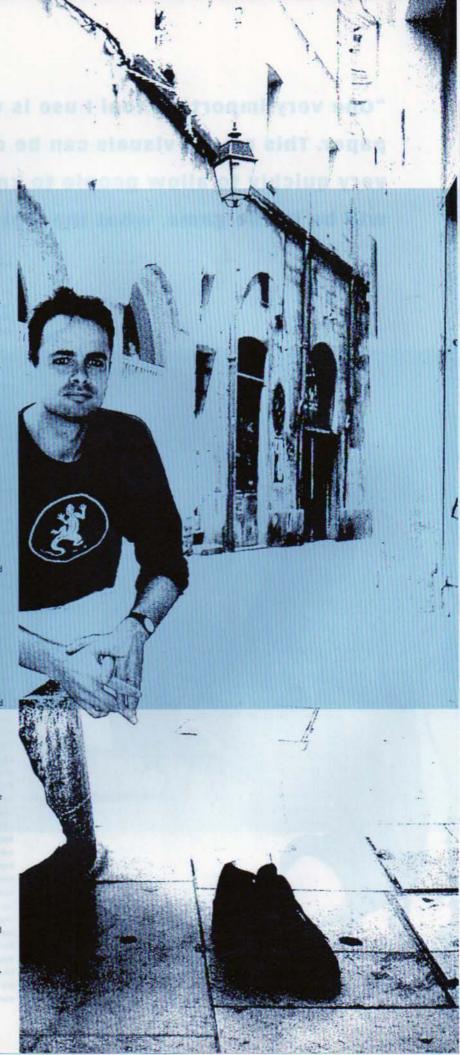
Edge: Bearing in mind you have a single vision, a universe in which everyone must have a place and a relationship with other, there seems to be a contextual anomaly with the Rayman character himself, something that's especially evident when viewing the pilot for the TV series. He has no arms or legs, for a start.

MA: That's because we wanted Rayman to be special, to be the one without arms and legs. It's the same as what I was saying about putting technology everywhere. If Rayman is the only one like this, he is special. So, it was interesting for the story because we could play around with a key character, but it's more special than it is interesting because it is unique. For Rayman we wanted something unique, and for the other characters we wanted other elements - proper arms and legs, one with different eyes, one who is quite stupid, another who looks like this or like that - but we did want to make a contrast between the others and Rayman in order for the story to be interesting. Edge: UbiSoft is a very young company, with around 1,400 employees around the world of an average age of 26. And the Rayman 2 team in Paris is certainly very young, with a large amount of the team coming straight from college. Why is that?

MA: It's not my decision. But, er, yes, because UbiSoft is growing very fast, it can be difficult to find staff. And the company wants to teach a lot of young people a lot of things. So we've made Rayman 2 by building a complete team of fresh people overseen by more experienced leaders. Edge: How has the team found the move from

2D to 3D with Rayman 2?

MA: UK developers are very strong on consoles. We don't have as much experience, and it took some time to reach a good level of technology, partly because the engine was maybe not created for a particular console in the beginning, so we had to make modifications and that took some time. Also, with the gameplay at the beginning, we could manage a lot of characters simultaneously onscreen. There were a lot of constraints that disappeared during the project, but it has been delayed and we will delay it until we think it's good for the people who pay good money for it. Edge: Not many companies seem to be able to use an 'it's finished when it's finished' approach. How are you able to do that? Is it because



"When I meet someone, I think, 'What are they like? Would this person ever be interesting as part of a videogame?'"

MA: Ah, yes, of course there is a commercial aspect. A smaller company would have to pay all of the people involved within a short space of time. Maybe some companies simply want to release a game just because it is the right time, just to be there, because it will sell. That must be tempting.

With Rayman we want something with continuity. It's not just a game. We have a lot of things to express with this universe and we don't just want to say, 'Here is another Rayman title that you can play and then throw in the trash'. No, we want to maintain a vision for the future. That's why we need to have a good product.

Edge: Presumably you'll be producing a Rayman 3, but you've been close to the character for ten years now – is there not a temptation to turn your back and go off to work on completely new projects?

MA: Yes, of course. If you have a look at Rayman 1 and 2, Rayman is the only character that's still the same – all the environments are different, and all of the characters are new. We just keep Rayman present, but we move every character so that there's no stagnation. We want something new – that comes from creative energy. I will not work on Rayman directly any more – this is the final title for me – but Pauline Jacquey has done a very, very good job with managing the Rayman 2 project, and she is to continue with that. She has very strong artists in Paris, and also 3D designers, who are pooling the characters, creating the scenes, the mechanics and all those things. They are able to create things and so it will continue in another place now. I will oversee things to ensure that the creations will begin there.

Edge: So what can you say about your next project?

MA: Nothing. We have only been working on it for two months so all the things I have been talking about, the technologies and what we could do with them, will be our goals. With new technology you have to have strong, clear concepts when you are creating the game. One concept I would like to work with is that of taking care of others. I was think about this earlier: I want people to really take care of other people. Not to take the weight off the others, or simply support them, I just want players to not feel alone in the game. I'm not talking about a multiplayer networked game, I'm thinking more of four players on one console.

This is one thing I would very much like to express in this game. But this is kind of secret stuff, so I don't know how much I can say. The way we will do it will be important, and I think we have enough here to create emotional things in terms of story now. To be able to reach these emotional goals I wanted to be sure that we would be able to display a certain amount of characters, using believable effects, and that sort of thing.

I wanted to have one person to be able to create a very strong screenplay, because I think this is a good discipline, because a screenplay is able to explain various types of gameplay very well, and we need to be able to make it clear that what we're working on is new right from the start. We should have more screenplay people, because their science, the science of images, means that they know how to position cameras well, and how to create effective lighting, etc. That's their job; we have a lot to learn from them, so I want to work with people like that.

Do you remember Little Computer People? Sometimes, you had the feeling that the man was alive. It did not mean that we really cared about him, but the first step was there. We may be using polygons, but you can imagine biology here behind the polygons. This is moving geometry; things that seem alive are moving. That, for example, is the step after I meet someone, and I think, 'What are they like? Would this person have a strong personality? Would this person ever be interesting as part of a videogame?' Because you put your trust in someone, but they may turn out to be a traitor... But this will not just be text with geometry, it will be so much more.

This may be something you could criticise in me – other people do – but when I meet people I wonder, 'What is he thinking about?' And all kinds of questions like that. These could be interesting considerations for gaming.

Edge: You have access to next-generation PlayStation dev kits at your



Japanese offices. Sony has made a big deal about the emotional possibilities the machine will be able to afford. Going on what you've just said, that must be something that interests you.

MA: Yes, But there will be no emotion in the machine's Emotion Engine. What you put in will create emotions. The Game Boy could be a very good emotion engine, because with a strong story you could have emotional response. Take a book - that is very low technology, very high emotion engine, but we couldn't say that pieces of paper are emotions. What we put on those pieces of paper are responsible for the emotions. I think some people think that the engine will create emotions, but it's marketing talk, really, to call a processor, a piece of metal, something like that. But maybe some people, when they're playing very strong games, will think that there is an 'emotion' engine in there Who knows?



CHOICE CUTS FROM THE VIDEOGAMING VAULT

DUNE

A rare treat. Not only was it better than the original, and a licensing tie-in that really worked, but it also marked the birth of the realtime strategy game. Command & Conquer may have got the kudos, but modern wargaming started here







Players in the *Dune II* world included (from top to above) the Emperor, the noble House Atriedes, and the insidious House Ordos

here's considerable irony that the game that gave birth to one of the two mainstays of PC gaming carried the usually innovation-suffocating numerical suffix. In this case, the only connection between the games was the Frank Herbert licence. While the original *Dune* was a nice enough adventure/wargame hybrid, Westwood's *Dune II* begat the point-and-click addicted world of realtime strategy.

Put simply, Dune II was the first wargame which didn't make you feel like your sexual organs were atrophying while you were playing it. In the then-revolutionary action of disregarding both turns and hexes, a simple point-and-click interface allowed megalomaniacs to throw forward armies. Only the 'grouping' commands and multi-selection present in later RTS games were absent from the interface.

It's equally a rare example of 'a good licence', with many of the tactical elements originating in the books. Bases could only be constructed upon the rock structures due to the rampaging Sandworms. Since 'Spice' was the most valuable substance in *Dune's* universe, it made a credible substance to gather. The two family dynasties of the novel, the Atreides and the Harkonnens, made interesting opponents, the former favouring light attacks and the latter heavy tanks. The Westwood-created House Ordos even introduced the ever-popular stealth elements to the genre.

While Command & Conquer tends to be credited with bringing RTS to the masses, Dune II was hardly a failure, either commercially or critically. But, after the imaginative leap required to make Dune II, Westwood settled into a process of gradual refinement that led to its forthcoming polished, yet hardly innovative, Tiberian Sun (see p90). For a genre that was born so fully formed, it's a little depressing to see how little it's advanced. Or possibly its early perfection was what was stifled it. The gauntlet Dune II threw down still lies in the sand. The question remains: can anyone pick it up?







For an audience used to the gentle pace of turn-based strategy games, *Dune II*'s realtime stride came as a shock

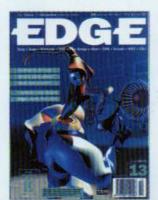




Balancing the different Houses' weaponry was one of the characteristics which proved vital in Westwood's RTS series. Likewise, the importance and vulnerability of power sources such as the Wind Trap (left) was another key component that would be recognised by C&C fans

EDGEVIEW

The videogame world never stands still, riding the breaking wave of advancing technology. In this regular column Edge puts the industry's progress in perspective with a look at yesteryear's headlines; five years ago this month



Edge issue 13, October 1994



One of Shiny's staff walks off with Edge's coveted 'Highest Waistline in the Industry' gong

he one and only 16bit title to grace a cover of Edge was Shiny's muchvaunted Earthworm Jim - although the individual handed reviewing duties inside the mag did not appreciate its value, calling it 'not that much fun', despite awarding it a creditable seven out of ten.

The month's news section opened with a report from Sony's second Tokyo press conference dedicated to its forthcoming PlayStation format. An exciteable Edge reporter 'also took the opportunity to look at the rear of the machine', which revealed an expansion socket for 'connection to a hard drive or modem'. Ah, what might have been.

As Sony continued rolling out its PR machine, Sega countered with some revelations for its Saturn format, showing a ten per cent-complete version of Daytona USA, which looked good on paper but was hardly indicative of the quality of the finished article.

This was a time when large-scale consumer videogame shows were still viable propositions, and E13 heralded the imminent Future Entertainment Show '94. replete with an Edge area dedicated to the latest technology. If you didn't make it along, thank your stars...









Clockwise from top left: E13 showcased the first wave of titles for Sony's ambitious new format; Sega fought back with an early demo of Daytona USA; Earthworm Jim; ellipsoids ruled the day in Ecstatica

Did they really say that?

Kazunori Yamauchi (who would later go on to produce Gran Turismo), talking about Motor Toon GP: "Our ambition is to make this the world's best polygon racing game'

Did Edge really say that?

Of Road Rash's audio: 'The music tracks are genuinely good Road Rash (3DO; 9/10), Earthworm Jim (SNES/MD; 7/10), enough to listen to on their own merit'. Hey, the editor at the time was a big fan of Crowded House and Shaun Colvin.

Testscreens (and ratings)

Alone in the Dark (3DO; 7/10), Star Control II (PC; 6/10), MKII (SNES/MD; 8/10), Burning Soldier (3DO; 2/10)

PIXEL PERFE

Every gamer has occasional moments of sparkling excitement, be it the first time Speedball booted up, or completing Sabrewulf. Here, Demis Hassabis relives the pants-filling climax of Carrier Command, a truly formative experience...

bought my first computer, a Spectrum 48K, when I was seven, with my winnings from a chess tournament. A couple of years later I upgraded this to a Spectrum 128K. Although I remember being mesmensed by a multitude of incredible games, from Rebelstar to Head over Heels on the Spectrum, it was only when I got to play Carrier Command on the Amiga that I discovered a game I remember being truly inspired by.

It was a great lesson in gameplay, with something for the player to do all the time (managing the carrier), interspersed with exciting events (such as invading enemy-held islands). The diversity and balance of the play was fantastic, with planes, tanks and all manner of

weapons at your disposal. In addition the Al player was one of the most challenging in any game, and I can clearly recall the tension of not knowing what the opposing carrier was up to and the pants-filling final climax when you came face to face with it. The level of detail in the game and the ability to control almost anything is something I have taken with me into my career.

Finding that Carrier Command had no multiplayer option was one of the biggest disappointments of my formative gaming years. For years afterwards I dreamed of redoing Carrier Command but adding a multiplayer option. Eightplayer Carrier Command, now that would have been something."



First love never dies, they say. Some people out there are still dreaming of an eightplayer Carrier Command





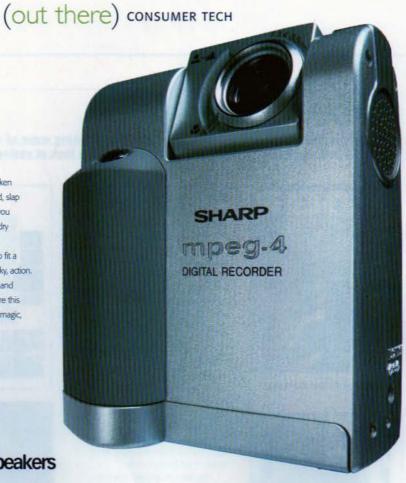
Sharp VN-EZ1E Internet Viewcam

■ *ETBC ■ Contact 0161 205 2333

At last, Sharp has given us the tool to force our shameful home movies on the entire world. Simply point the Internet Viewcam at your family barbecue or drunken mates and record a few minutes of footage, whip out the 4Mb SmartMedia card, slap it in a Flash Path Floppy Disk Adaptor and stick it in your PC to copy over. Now, you have a readily digitised movie of your family event ready to email to all and sundry or post on your Website.

Thanks to the wonders of MPEG4, the resulting files are tiny, allowing you to fit a minute of optimum-quality images on a 4Mb card or 17 pieces of long-play, if jerky, action.

However, you shouldn't expect crystal-clear footage. The pictures are grainy and slightly out of sync with the crackly soundtrack, but that's inevitable in files that are this small and so easily portable. But for quick and easy distribution of home movie magic, the Viewcam can't be beaten.



B&W Nautilus 800 Home Cinema Speakers

■ *£5,650 each ■ Contact: 01903 750750

Want to demolish your house but can't afford the buildozer? Well, that's no problem. For a mere £5,650 a throw you can fill your abode with the B&W Nautilus Home Cinema outfit and turn up the bass. Within minutes, your home, and most of your neighbours, will be shaken to the foundations.

Just make sure that before the walls come tumbling down you have enough room for the system in the first place. The entire setup comprises four bookshelf speakers (with optional stands for an extra £800 each), a central speaker, and a subwoofer roughly the size of a small sofa. B&W has crammed a lot of innovative technology in the rather large group, including Kevlar drivers to avoid unwanted resonance, tweeters designed to perch on the speaker's head and a phenomenal sub that throws out an earth-shattering 450 watts.

With sound to die for and looks to match, the Nautilus home cinema system is worth every penny.







To get a real cinematic feel in your home, nothing beats a good Digital Light Processing (DLP) projector. While second to none for projecting the likes of Driver or Episode 1 Racer against the wall, the Kodak DP1100 is also great for giving your DVDs the big-screen glory they deserve. Sturdy, yet surprisingly compact, the projector features Kodak's built-in pictureoptimising software that makes the best job possible of any digital input, be that computer or DVD, but obviously struggles with lesser formats like good old VHS. Picture quality is good, although no one in their right mind would listen to a soundtrack through its shoddy little speaker. Connect it up to your usual home cinema outfit and you're laughing.

The only drawback? Due to its cooling fan and colour filter motor, don't expect the DP1100 to be the quietest beast. After a while you do get used to the constant drone coming from the projector, but at times it's loud enough to drown out a film's more 'romantic' moments.





FujiFilm Instax Mini

■ *£65 ■ Contact: 0171 586 5900

Just when you thought the civilised world had forgotten about the humble Polaroid - leaving it a photographic method popular only in the lives of those who can't send their, shall we say, sensitive photos to Boots - Fujifilm has created its own version of the instant marvel. It's always good to see a company with its finger on cutting-edge technology.

In seriousness, though, the cannily titled Instax Mini is a damn sight better to look at than Polaroid's bulky old models. With the stylish silver lines of a digital camera, and just about passing for pocket-size - so long as your strides feature pockets the size of roomy suitcases, that is - the camera also boasts a retractable 60mm lens. However, no matter how good the Mini looks, it doesn't distract from the fact that the photos it produces, presented in a handy wallet-sized format, are of a quality bordering on abysmal. Well, what would you expect from an instant?







(out there) REPORTAGE

Japanese Otaku show other side of their character

Japan: While there are plenty of earnest arguments over the role of characters verses the place of technology in gaming. Japanese fans steer well clear of such intellectualism. As proved by the second Character Show, recently held in Tokyo, there's nothing these cosplay (literally 'costume players') love doing more than dressing up as their favourite character from Sakura Taisen or Dino Crisis and spending the day browsing expensive game-related paraphernalia.

Unsurprisingly, with around 35,000 people attending over two days, game companies take the whole event very seriously, with 53 of them manning merchandising stalls. Sega was, of course, well represented, with part of its booth dedicated to the *Shenmue* demo shown at E3. Branded goodies such as Sonic and Dreamcast keyrings, as well as *Shenmue* mousemats, folders and mobile-phone straps kept fans happy. Elsewhere, other gems included a "Summer

Mix' version of Konami's Beatmania keychain, and a Xevious roll-up calculator. Namco parodied the Japanese word for noodles, 'Ramen', selling its cheery 'Pac-men' variety. It also installed a dispenser of Tekken vitamin drinks, swigs of which left **Edge** tasters gasping for beer to cleanse their palates. The most original tie-in, however, was Capcom's Bio-Hazard bike helmet.

More peculiar were the human-size dolls from Paper Moon. Based around anime series idols, the starting price was around £2,000, depending on whether it was dothed with a bathing suit or school uniform. The official Cospa stall had some interesting items, too. For £200 you could buy a Vampire Soviour's Morrigan or a SFZero 2's Sakura costume. And for those with just a camera, there were plenty of cosplay fans who were more than willing to simply have their photos taken. That's what dressing up is really all about, after all.





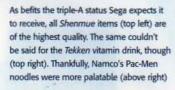


































If Capcom's *Bio-Hazard* helmet (top left) is the masterpiece of branded games marketing, then what's Namco's roll-up. *Xevious* calculator? To the more esoteric – and wealthy – collector, Planet Moon's full-size, bikini-clad idol dolls (top right) were a big attraction







(out there) REPORTAGE

The mouse that bites back



Judging a game by its cover

UK: Whether a game is taken more seriously by reviewers because of the money spent on its marketing is something of a moot point, but innovative approaches never fail to make a difference. And the packaging of Delphine's Darkstone (see p93) is certainly impressive. A very swish medieval-style tome opens up to reveal game discs, scrolled poster artwork and a video including the game's theme tune. And with the exception of the song (think earnest Europop with lyrics about killing dragons), it's a welcome addition to the Edge office, dominated as it is by functional piles of gold CDs.



DataStream



Mark out of 40 awarded to Soul

Calibur by Famitsu magazine: 40 Number of games to previously score perfect marks in Famitsu: 1 (Zelda: Ocarina of Time) Percentage rise in Sega's stock price following news of Soul Calibur's perfect score in Familisu and news of 100,000 preorders: 17% Percentage of Japanese games companies without plans to develop online games: 8% Total revenue Pokémon franchise has generated worldwide: \$5bn Amount of units of Pokemon Pinball shifted in 20 days, to become the top-selling Game Boy Game in the US: 262,000 Percentage of pay-for-view online content that is pomographic: 69% Number of people playing EverQuest during peak hours: 34,000 Number of excited realtime strategists who applied for Microsoft's beta testing program for Age of Empires II: 160,000 Percentage of the adult US population that can be reached via the Net: 60% Percentage of the adult US. population that can be reached via telephone: 80% Increase in the speed of 3D graphics chips in the last 18 months: 5-fold Amount of money bleem! has spent on court costs defending its PlayStation emulator from Sony: \$250,000 Percentage of US Internet users who are women: 47.5% Percentage of Japanese Dreamcast Internet users who are male: 94% Percentage decrease of game software shipped in Japan during 1998: 13% Percentage decrease of console hardware shipped in Japan during 1998: 17% Number of flags captured in Wireplay's Team Fortress Challenge (see opposite) by the Edge team: 0 (Oh, the shame ...)



Half-Life collects extra lives

US: Considering Half-Life's use of the Quake II engine, it was never going to take long for the rampant Quake community to get their hands on the guts of Valve's masterpiece and start producing mods. And, to its credit, the developer has been supportive of the hackers' efforts, even releasing a special SDK to allow them to enhance the game's code. But with 163 mods currently in development, even it must be surprised about the popularity of the pastime.

Seven of the best were recently unveiled at the Half-Life Mod Expo, held in an Internet café in San Francisco, with Valve's Gabe Newell on hand to check out the competition. One of the most interesting mods is Science & Industry, which heightens the role of scientist NPCs. Working in labs, their role is to research new weapons technologies — you can even kidnap your opponents' scientists to speed up the process. The Australian-developed Kananball is another lateral take on the game, being an 'extreme sport' version. USS Darkstor and Chemical Existence are more traditional singleplayer kill-the-alien affairs, whereas Action Half-Life is ultra realistic — it has no health powerups and limited ammo, and you have to manually reload. For more details of Half-Life mods, check out www.planethalflife.com/modcentral.









(Clockwise from top left) Best of the Half-Life mods: Science & Industry, Action Half-Life, Chemical Existence, USS Darkstar and Kanonball

Hardcore wade in to destroy Fortress Edge









And in the blue corner, the 'crack' **Edge** team attempts to avoid a massacre by wiping itself out before the game starts

UK: Although the trades description act could have been invoked by the phrase "Take on the crack Edge team at Team Fortress", the highlight of Wireplay's Fortress Edge challenge was still an enjoyable, if sobering experience. It also underlined the fact that working 24 hours a day on a magazine isn't sufficient training when fighting against

people who actually *play* games eight hours a day. And so the final result was an ignominious whitewash at the hands of the AK47 clan. And excuses such as 'The Well isn't a familiar map' and 'Our frag counts weren't too bad' aside, it's fair to say AK47's concussion grenade-jumping tactics were eye-opening as well as scarily impressive.





(out there) REPORTAGE

Tommy boy

US: Although not up to the high standards that Edge expects from its Game Boy Color competition, Nintendo and Tommy Hilliger have released a limited-edition model to be sold in 1,100 Hilliger stores.

Last-minute entries for the

Edge competition (see E74) to
design your own personalised
Game Boy Color, the winner of
which will be entered in
Nintendo's national event, will now
be accepted until September 12.



PlayStation evolution laid bare

UK: With all eyes focused on the colour and shape of the nextgeneration PlayStation, it seems an appropriate time to look back at the first attempt of Sony's legendary Design Centre. As revealed in the forthcoming book Digital Dreams (Lawrence King, £25), the aesthetics of the PlayStation were meticulously designed by Teiyu Goto, chief art

director of the Interaction Design Centre. Over two dozen joypad mockups were investigated. And, after the name 'PlayStation' had been bought from Yamaha for an undisclosed sum, graphic artist Manabu Sakamoto created more than 50 different variations of the P and S before Sony's top brass agreed on the 3D 'shadow' design.



















































Kings do battle in Dallas

US: With *Age of Empires II: The Age of Kings* close to completion, Ensemble Studios took the opportunity to throw a party to celebrate the fact, as well as its recent move into new swanky Dallas offices.

With the free booze and food hoovered up, the highlight of the evening turned out to be the world's first two-way Battle of the Kings deathmatch which pitched AoE's senior designer Bruce Shelley and Ion Storm badboy Jon Romero against a team comprising of fellow AoE designer Sandy Petersen and Gas Powered Garnes' Chris Taylor.

After the smoke of battle cleared, Sandy Petersen and Chris Taylor, his Total Annihilation skills obviously still intact, were declared the winners. Romero, by contrast, performed pitifully, but then again, neither realtime or strategy have ever been his strong points. Just ask Eidos.

Final Fantasy Sandman

US: The tenth anniversary edition of cult DC comic Sandman will feature the artwork of Final Fantasy artist Yoshitaka Amano. Sandman: The Dream Hunters is set in ancient Japan, long before the death of main character Morpheus. It will be released as a hardback on October 30, priced \$30.









Main photograph, from left to right: after the heat of battle, Sandy Petersen, Chris Taylor, Jon Romero and Bruce Shelley compare prizes

Lammy's underworld performance proves too hot for US

US: Despite claims that videogames are warping the youth of America, Um Jammer Lammy is the last title you'd expect to fall foul of the censors. But in order to get a 'Teen' rating, Sony has had to cut the scenes where Lammy dies after slipping on a banana. In the original, she wakes up in hell, and has to play guitar to regain her life. The US version relocates the action to a remote island instead. Smashing.













From banana skin-induced death to the fake 'game over' sequence, American fans of Lammy and her axe-weilding adventures will have to shell out for the Japanese version if they want to witness these scenes, which have been cut to protect the young minds of middle America





(out there) REPORTAGE

PlayStation gets MP3

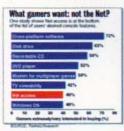
US: With MP3 the flavour of the year, some bright sparks have come up with the idea of hacking together a PlayStation player. Interested parties will be pleased to note that the MP3 format allows up to 12 hours of music to be compressed on to each disc, and the device is expected to be compatible with cheat codes, too.

It all makes Sony's decision to ship its next-generation console without an IO/Parallel port appear eminently sensible.



Console desires

US: Surprising evidence from a recent survey suggests that Sega may not gain many extra sales from Dreamcast's email and Web-browsing capabilities. Gamers were more interested in the potential for online gaming, but even that was beaten by the desire for recordable media. Let's hope lomega rolls out its Zip drive before too long.





Sega talks to the animals

Seaman is already something of a success story in Japan: over 120,000 copies of the Alife sim were shifted within its first three weeks.

Taking elements of Tamogotchi and Furby culture, the goal of the simulation is to nurture a seaman from the egg stage until it is a fully functional virtual pet. Game controls include maintaining the oxygen levels of the fish tank, as well as the amount of heat and light. You can also

Japan: Probably the strangest title to be released for Dreamcast to date,

functional virtual pet. Game controls include maintaining the oxygen levels of the fish tank, as well as the amount of heat and light. You can also manipulate the seamen, tickling or slapping them, depending on your mood. Each Seaman is designed to have its own personality, too. And although they have a predefined vocabulary, they can 'learn' words, so you can give your pet a name. Communication is carried out via the microphone that plugs into one of the VMS slots in the joypad. Designed by Seaman developer Yoot Saito, Sega has announced that it will be an official Dreamcast unit, compatible with other voice-input games in the future.





US: Dreamcast's American marketing campaign shifted up a gear with the unveiling of its full-scale TV advert. Codenamed 'Apocalypse', the complete 90-second version will air during the MTV Video Music Awards on its launch day, 9/9/99. Prior to this, a minute-long version, including four seconds of ingame action, will rotate on nine cable channels.

The live-action-driven ad features a blackbelt female ninja out to steal a Dreamcast. The console, thanks to its network capabilities, goes online to stop her attempt. More than 40 different game characters, including Sonic, are also shown.













How to get a Dreamcast on launch day if you haven't preordered: Sega latest hard-hitting US TV ad

(out there) MEDIA





ARAB STRAP **Elephant Shoe**

They may have made a reputation as dour Scotsmen who enjoy cheap are slowly slouching their way towards happiness. On their third album, rays of sunlight make their way into their miserable Falkirk lives. may not be smiling, but at least they're keeping their end up.



her: Secker & Warburg 0 436 204770 Po Bronson

(Go!Beat)

booze and bad sex, but Arab Strap Of course, Moffat still sounds like he's dealing with the worst hangover of his life, but at least the beats are more energetic. There's even a hint of love in his voice when he sings, 'Shouldn't we be naked?' Arab Strap

DI VADIM Life From The Other Side (Ninia Tune)

If hip hop is about marshalling your resources and producing an album full of great vocal cuts, then Vadim is at the height of his profession. His style mixes music concrete, slices of film and instructional dialogue with vocal collages from a variety of performers. And while Company Flow and Scratch Perverts do their thing, the hottest track is Sarah Jones giving the lowdown on 'Your Revolution'. The 25 tracks clock in at 73-and-a-half minutes, too, so you get your money's worth



Kurt Anderse o 7472 7469

HIGH LLAMAS Snowbug (V2)

It will come as a shock to long-term fans, but the sessions for the High Llamas' fifth album were split between the Jesus and Mary Chain and Steve Albini's studio, It may account for the subtle shift in their characteristic sound. The Steely Dan and Beach Boys influences are less obvious. In their place is a gentle self-confidence that's revealed in the deft way 'Snowbug' avoids cheesy clichés. And while its lounge charms won't appeal to everyone, it's a surprisingly addictive experience



INTERNET Site: Virgin Net URL: www.virgin.net

Latest of the big brand names to venture a toe into the chilly waters of the Internet, Virgin Net's portal is the usual collection of entertainment and leisure news. You can find out where and when movies are playing and what gigs are happening, as well as keeping up to date with sporting activities. Gamers will be more interested in the games arcade however. Using the latest version of Shockwave, the retro pleasure of Space Invaders, Asteroids, Pac-man and Frogger are just a click away. And don't doubt how much Virgin wants your custom. In fact it's so keen that it has set up a special competition to win a classic arcade machine. See the promo on p37 for more details.



With a reputation as Wired mag's hottest writer and a face that could have him modelling for Gap, it's no wonder Po Bronson is the rising star of Silicon Valley reportage. But after his previous two novels, The Nudist on the Late Shift investigates the reality of the collision between bleedingedge technology and venture capital. And, as ever, the truth is much stranger than its fictional twin.

It's the goldrush mentality revisited. Anyone with an Internet-sawy idea or some C++ experience is there, trying to join a startup that will make them millionaires. Chum is the name of the game. People continually move from job to job. There are even headhunters to headhunt for headhunting firms.

But in the midst of all this action, Bronson's skill is in finding the human side of the business. One of the strongest images is an old picture showing Yahoo! co-founder David Filo sleeping under his desk, after a heavy stint of coding. He was worth \$500million. Bronson goes back to check out the state of Filo's sleeping habits now he's a sub-35-year-old billionaire. He no longer sleeps under the desk, but only because there's so much trash that he can't get under there. Other figures are more anonymous: the kids trying to code an online game without full-time staff, the naive dreamer who has flown in from France because he couldn't forgive himself if he missed the opportunity. And through them all Bronson creates a vivid snapshot of the fastest-moving industry on earth. Don't miss it.

TURN OF THE CENTURY

If the millennium is to blame for anything, it's the growth in enormous books that sieve the dirt of popular culture in the hope of finding our elusive zeitgeist. Kurt Andersen's 600-odd-page treatise fits this bill perfectly. A weighty tome in every sense, it attempts to integrate the intricacies of trading futures with the collision of hard news and infotainment, and the antics of teenage hackers. 'I know my stuff, Kurt Andersen is telling us. There's also an overwhelming sense that he is trying to say something big about the modern condition.

Turn of the Century is a hi-tech love story between TV producer George Mactier and his wife, Lizzie Zimbalist, a software exec. It's the usual deal: too many late nights working, things slowly drifting until everything falls apart. But too often the downward flow of the relationship is stifled by techy details. And while there are some neat comments on the sharpness of current business practice, with Microsoft taking its usual beating, it all ends a little clinically. In 1999, it appears that affairs of the heart are less important than the click of a mouse.







VIEWPOINT

EXPRESS YOURSELF IN EDGE - WRITE TO: LETTERS, EDGE, 30 MONMOUTH STREET, BATH, BA1 2BW (email: edge@futurenet.co.uk)

hat is Nintendo up to? It always seems to be running in a hundred directions at once.

In issue 74 Edge revealed that Nintendo would be releasing 100,000 64DDs. Why? This console has been killed off, reinvented and killed off again more times than anyone cares to remember. Why spend years developing a platform, building a specific online gaming server, and then creating a whole range of peripherals for a mere hundred thousand units?

Which brings me on to my next point - peripherals. Nintendo is infamous for its 'unique' peripherals. See how many you can remember: the N64 videocamera cart, the N64 Game Boy converter, the voice microphone and a whole lot more.

Now the big N has announced the Game Boy mobile phone adapter. Mobile bloody phone adapter? What will the adapter consist of? I would say it would need a new battery, a cartridge address book and the rest of the phone technology - as well as a new speaker and microphone. So why would anyone want to have a mobile phone that doubles as a Game Boy or vice versa? First of all, the Game Boy is about twice the size of a normal mobile alone. Why would you want to strap a Game Boy to your face? Come to think of it, why would you want to play GB games on your N64, or plug a camcorder into the black box? I'm sure that Nintendo could argue its way out of this peripheral hell - I could, after all, have my own face on a videogame character! - but do people really need or want all this? Will gamers buy all this extra kit? No. Will it be supported by a wealth of software? Probably not. Can

anyone be bothered to wait for Nintendo to fully announce Project Dolphin? I know I will not be waiting with baited breath for Nintendo to exaggerate its specifications and tell us of the wonder that lies ahead. Give me a

the charts. I believe that these casual gamers will eventually become more discerning in their tastes. I see this happening with some of my friends, people who will play Crash Bandicoot for half an hour a week, but then clamour for a

'I know I will not be waiting with baited breath for

Nintendo to exaggerate its specifications and tell us of the wonder that lies ahead. Give me a nice Dreamcast or a next-generation PlayStation any day'

nice Dreamcast or a NGPS any day. Has Nintendo forgotten its roots? Has it lost its way? Discuss.

> Martin Rowse. via email

two-hour game of Mario Party or GoldenEye whenever they have the opportunity. You have to remember that most casual gamers do not look at what is available on



Martin Rowse thinks that the Nintendo 64DD is a sign of a company losing the plot

n response to Trung On's attack on casual gamers in E75, I too despair at the rubbish that these people will buy for their machines, but you have to realise that it is the casual gamer who has revitalised the industry. I wouldn't simply point the finger at PlayStation owners either, as enough people bought Superman on the N64 to justify it a position in machines other than their own, and are mainly influenced by advertising and shop displays. I just hope that this changes in the future, as these gamers begin to expect more from their machine. I think that the highprofile launch of the Dreamcast may well help this, as PlayStation owners see demos of games with far better graphics than their grey box can produce (after all, they bought a

PlayStation in the first place because it offered the best graphics available).

I also don't just blame gamers for the blinkered 'PlayStation rules' view. The interview with Codemasters in E75 said how the team were really excited about PlayStation 2, but not about Dreamcast. They then stated how 'excited' they were about the idea of consoles with modems and Internet play. Seems that Sony doesn't really need to employ a marketing department when developers are trying to shape the public's perceptions...

> Matt Duffy. via email

here is nothing like a bit of good old-fashioned irony to make you giggle. I am of course referring to Trung On and his rant about 'non-hardcore gamers' playing games and making it a mainstream hobby/activity/waste of time, etc. If he'd had his way then shops which sell nothing but games would not be as prevalent on the high street and he wouldn't be in his current job. Maybe we should go back to the old days when a few idiots bought Neo-Geos at outrages prices and software was rare and extremely overpriced - as opposed to being just overpriced

> Raymond Russell, via email

was amazed by the comments of Trung On about casual gamers. I also felt that Edge's response was equally fascinating in that it came close to condoning his puerile comments. It appears that this guru of all that is gaming acquired his infinite wisdom

working for Electronics Boutique. Was this in the PR department, we cry? I think not.

Perhaps Edge could approach EB for a response to its employee's outburst. Particularly as EB's customer base is probably 80 per cent casual gamers. Mr Trung (or is it Mr On?) clearly believes the gaming world was his little secret and, now all the other children have come to play, it's all spoilt. Mr Trung, you are sadly mistaken the success of PlayStation has ensured the future of console gaming for everyone and has spurred the industry on to bigger and better things. As Edge rightly stated, the more games that sell, the more money there is to produce the big titles.

Mr Trung, I am a PlayStation owner and would welcome the opportunity to explain the virtues of this excellent (if slightly dated) console to you with the help of my friend, Mr Baseball Bat.

> Nick P, via email

rung On's letter about the casual gamer raises a previously neglected question about how the rise of gaming as popular entertainment might 'dilute' games. It's an interesting issue, but Mr On's views aren't exactly helpful – in fact they're downright patronising.

Not everyone has hour after hour of gaming time a week. With the dawn of the mass market, there will inevitably gamers who only switch on their machines once or twice a week, to have a crack at a level of *Tomb Raider*, or play a few rounds of *Bust-A-Move*. Does that make them sheep, for not devoting hours on end to more 'hardcore' titles?

Does it hell. Gaming is entertainment, and in any entertainment industry there's a place for distracting, quality, populist material. To say that people shouldn't buy a game because it's undemanding, or similar to the game they enjoyed last year, is like claiming that people shouldn't see comedies at the cinema, or listen to pop music.

Not all of us have the luxury of spending the best part of a day breaking into a difficult new game. Some of us just want to be taken away from the pressures of work, family, mortgages, etc, for a couple of hours. And, providing there are still plenty of games for the hardcore market out there, I can't see anything wrong with that.

Mark Clapham, via email

everal years back, gamers were regarded as anorakwearing geeks who couldn't talk to girls. Things have changed. Gaming is now seen as a normal, healthy pursuit, and, arguably, 'cool'. This to experience the thrills I had with my Atari XL/ST/MD/SNES when I was younger and still have now.

'People who play real soccer games are the people who play ISS'? Oh dear. You might as well say, 'People who play real soccer games are the people who play soccer!' But that would be sarcastic and perhaps missing the point. Let people play what they like!

I am only 17, but have been a gamer (hardcore or otherwise) since I was even smaller. I have not only heard of the Neo-Geo, but have played it, along with the Lynx and PSX amongst others. I, however, don't mind people using a PSX as their first console. In fact, my sister played TR2 and is now very interested in consoles, even considering buying a DC - a triumph as far as I can see. It says something that Sony can cater for the hardcore gamer (MGS, GT, Tekken 3) and the casual gamer (MGS, GT, Tekken 3) simultaneously.

Long live gaming for everyone!

William Turner,

'Codemasters said how the team were really excited

about PlayStation 2 but not about Dreamcast.

They then stated how 'excited' they were about the idea

of consoles with modems and Internet play'

state of affairs is largely down to Sony, and the all-pervasiveness of its console

With the acceptance of gaming, however, came a price – the casual gamer! These evil people, possibly popular at school, now play games and, worse still, enjoy them. Why? Because they are meant to be fun, first and foremost, and it pleases me greatly that so many people get

P.S. I have an anorak and a girlfriend.

And I also think GTA is good.

Last month's letter from Trung On prompted more response than any other in the last year. And all of it negative. You bunch of casuals, you.

feel I must contribute something towards your Testscreen editorial of E74, in which you lamented upon the nature of narrative in contemporary videogames.

To begin, though, I must raise a minor quibble. While I agree with your assertion that Half-Life benefited from the inclusion of a 'plot', your argument that this constituted a 'narrative' is, I believe, somewhat hopeful. Certainly, in comparison to its peers Half-Life boasts an excellent structure, featuring a point of focalisation (Gordon Freeman), an exposition (in which the player is, for once, directly implicated) and a denouement. But the game possesses few of the components necessary for a narrative to take shape, the most telling omission in this respect being the lack of turning points. As a result, Half-Life is as linear and as predictable an experience story-wise as Wolfenstein.

This shallowness of storyline is a problem inherent to the current methods of game design. At the moment narrative content is a secondary consideration next to the technical development of the product which is perhaps inevitable given the limited time which softcos have to get things done. And yet, to my mind, this is putting the cart before the horse. Games have the potential to offer a progression in storytelling that literature, theatre or film simply cannot offer - a truly interactive narrative. But before this 'Holy Grail' of gaming can come about, the scripting process has to become the very foundation of the product, with the technology serving the storyline. This is something that Shigeru Miyamoto realised when he began contemplating his fairytale-like Zelda: Ocarina of Time - and the superiority of the game is manifest.

Ultimately, the lack of credible writing talent within even the most respected softcos is indicative of the embryonic status of videogames as an artform. The medium certainly has a long way to go before it can expound stories superior to those offered by the established arts. I find it difficult to imagine an emotive storyline being found in a game where the sole form of expression is to drive, shoot, or run. But hopefully the next wave of consoles will offer the beginnings of an age where artistic expression is no longer subjugated to technical considerations. I will not, however, be holding my breath.

Chris Ward

ames already invoke emotions very well - and they always have done. From the Space Invaders' relentless movement towards the bottom of the screen to running out of ammo in rooms full of demons in Doom, emotions are felt by the player. The emotions gamers feel do not depend on the emotions portrayed by the character in the game - after all, we can often feel intense emotions while playing something like Tetris. New technology like the PlayStation 2 can't extend these emotions unless the new technology facilitates new types of games. Don't get me wrong - I enjoy atmospheric camera angles and cinematic scenes as much as anyone, but I recognise that they are just an addition to the game. Ultimately, the game itself should be what is most important for both designers and players.

> Tom Fisher, via email

t seems Sega Europe is having a right old laugh at our expense once again. The £199.99 price tag for the Dreamcast seems like a fair price, but it is also saying, 'You can now access the Internet for under £200'. Fair enough, but I'm already netted up and have no wish to pay for a modem I'll never use. I suggest people do what I have just done – purchase a shiny new Dreamcast (Hong Kong version) for a paltry £150 – sans modem, of course. Who says import gaming always comes at a premium?

Mark Brooks, via email

am your average pissed-off PC owner, and the 'Beauty of pirate plays games he did not pay for. But I pay for games I don't play. There are so many games I must have, just in case I actually find the time to play them, but the fact is I don't get around to half of them.

Take Final Fantasy, for example: I've got both the PAL and the NTSC version (my PSX isn't chipped, it's a Net Yaroze), but I didn't play FFVII for more than 15 minutes in total. I reckon I buy about twice the amount of games that I find time to play. So it seems that I'm making up a little for all the pirates. (That said, I am totally against piracy!)

Dennis, via email

Send us your spares, then, Dennis. We'll give them a good home. the allusion that the front-end of 'Dallas', the TV show, bore footage of the oil-rich city's skyscraper buildings, when, in fact, with the exception of the Southfork Ranch exterior shots, filming was undertaken entirely in Los Angeles. Except for that time when Elvis's wife went to Paris with Bobby.

Paul Roundell, via email

Sorry, Paul. We bow to your soap knowledge. Won't happen again.

hile reading through some past issues of Edge, an interview with Nolan Bushnell in E20 caught my eye. When asked what still needed to be accomplished in videogames, he



replied: "No one has really figured out what the 'she's' really want... It turns out that I've actually figured it out," but he would not elaborate further – it was all to be made clear that autumn. This was back in 1995. Can you shed any light as to what this great idea of Bushnell's was? It's got me completely stumped.

Tim Miller, via email

It's was a knitting sim. Obviously. The poor fellow simply couldn't drum up publisher support, though.

'A pirate plays games he did not pay for. But I pay for games

I don't play. There are so many games I must have, just in case I actually find the time to play them, but the fact is I don't get around to half of them'

beige' Testscreen intro in E75 was absolutely spot on. I am upgrading my PC so that it runs the best, new games, for just £200 - I'm getting a DC. With conversions of the PC's best games, Sega's best coin-ops and (hopefully) great original games, you can't go wrong for £1,400 less than a top-spec PC. And anyway, the PS2 and N128 won't be out till 2001. Sega should be demanding (not urging) that developers give us full-screen, full-speed games. The enjoyment of games as they were intended to be played shouldn't be restricted to the Japanese.

> Rob Franklin, via email

very month there seem to be new debates around piracy. A

orry to be pedantic, but I am. On page 50 of E74 the article states that in the movie 'The Rock' (1996) Sean Connery's character (John Patrick Mason) uses a Ferrari F355 as a getaway vehicle. He doesn't, he uses a Humvee. It is Nicolas Cage's character (Dr Stanley Goodspeed) that commandeers the F355 from a hotel guest and later fucks it up royally.

Sorry, and no, I didn't get a semi about being right. By the way, love the mag, I've never missed an issue.

> Philip Buckley-Mellor, via email

write in utter dismay with regard to the startling inaccuracy in the feature (E73) on id Software. I refer, of course, to Next month.

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